CYC (SEC) - 102

Intellectual Property Issues

and

Cyberspace-The Indian Perspective

School of Law

UTTARAKHAND OPEN UNIVERSITY

Teen Pani Bypass Road, Near Transport Nagar, Haldwani - 263139
Phone No- 05946 - 261122, 261123
Toll Free No. 18001804025
Fax No. - 05946-264232, Email- info@uou.ac.in,
http://uou.ac.in

UNIT WRITING

UNIT WRITERS	UNIT
[1] *Ms.Sapna Agarwal, Advocate High Court of Uttarakhand, Nainital*	Unit- 1, 2,3,4
[2] *Dr.Razit Sharma, Assistant Professor,* *Law College, Uttaranchal University, Dehradun Uttarakhand*	Unit- 5,6,7
[3] *Dr.Anupam Manhas, Head of the Department, Faculty of Law* *Career Point, University, Hamirpur, Himanchal Pradesh*	Unit- 8 ,9,10
[4] *Dr.Sushim Shukla, Assistant Professor,* *Law College, Uttaranchal University, Dehradun Uttarakhand*	Unit- 11,12, 13,14

EDITOR

Dr. Deepankur Joshi, Assistant Professor and Coordinator,
School of Law, Uttarakhand Open University, Haldwani, (Nainital)

Edition- 2024, Pre-Publication copy for Limited Circulation ISBN-

Publication- Directorate of Studies and Publication, Uttarakhand Open University, Haldwani, Nainital.

E- Mail: studies@uou.ac.in

.

INTELLECTUAL PROPERTY ISSUES AND CYBER SPACE-THE INDIAN PERSPECTIVE

INDEX

S. NO.	UNIT	PAGE NO.
1	UNDERSTANDING THE TECHNOLOGY OF SOFTWARE	4 - 31
2	COPYRIGHT IN INTERNET	32 - 52
3	JURISDICTION ISSUES AND COPYRIGHT	53 - 70
4	INFRINGEMENT,REMEDIES OF INFRIGEMENT	71 - 107
5	UNDERSTANDING PATENTS	108 - 119
6	INTERNATIONAL CONTEXT OF PATENTS	120 - 131
7	INDIAN POSITION ON COMPUTER RELATED PATENTS	132 - 143
8	UNDERSTANDING TRADEMARKS	144 - 152
9	TRADEMARK LAW IN INDIA	153 - 164
10	TRADEMARK IN INTERNET	165 - 177
11	DOMAIN NAME REGISTRATION	178 - 183
12	DOMAIN NAME DISPUTES AND WIPO V DATABASES	184 - 191
13	PROTECTION OF DATABASES	192 - 199
14	INDIAN LAW ON DATABASES	200 -205

UNIT 1

UNDERSTANDING THE TECHNOLOGY OF SOFTWARE

STRUCTURE

1.1 INTRODUCTION

1.2 OBJECTIVES

1.3 SUBJECT

1.3.1 COMPUTER SCIENCE – AN INTRODUCTION

1.3.1.1 INTERNET

1.3.1.2 SOFTWARE

1.3.2 ALGORITHM AND CODING

1.3.2.1 SOFTWARE DEVELOPMENT

1.3.2.2 MODLING LANGUAGE

1.3.2.3 PROGRAMMING TECHNIQUES

1.3.2.3.1 STRUCTURED PROGRAMMING

1.3.2.3.2 MODULAR PROGRAMMING

1.3.2.3.3 TOP DOWN DESIGN

1.3.2.3.4 BOTTOM UP APROACH

1.3.2.3.5 OBJECT ORIENTED PROGRAMMING

1.3.3 COMPUTER NETWORKING

1.3.4 NETWORK SECURITY

1.4 SUMMARY

1.5 GLOSSARY

1.6 SAQS

1.7 REFERENCE

1.8 SUGGESTED READINGS

1.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

1.10 **ANSWER SAQS**

1.1INTRODUCTION

Software technology is the fastest growing technology of this era. From 80s, software processes, both for engineering and for management, boosted technology evolution, in past 25

years. With the advent of internet the boost in software technology is beyond any imagination. Internet turns whole world into a village. Every aspect of human life is affected and inspired by the technology of software. Despite of huge development in this field, as we seen today, there is lot of aspects, which are, yet to be discovered. It is rightly said by Robert Cringely- *"If the automobile followed the same development as the computer, a Rolls-Royce would today cost $100, get a million miles per gallon, and explode once a year killing everyone inside"*[1]

Though it is very vast topic, in the present unit we shall tried to touch every aspect or corner related with the field of technology of software.

1.2 OBJECTIVES

After reading this unit you are able to understand the following:

- General introduction of computer science
- History of computer
- Components of a computer
- Hardware and software
- Algorithm, coding and software development
- Techniques of different types of programming
- Internet and internet network
- Computer/software languages
- Network security

1.3 SUBJECT

Computer Software Technology helps us with building computer Software systems, tools, modules and software applications. This field has evolved dramatically over the last decade. Computer Software Technology is the amalgamation of computer science, information technology and computer engineering. Software/computer technology is a general term covering the development methods, programming languages, and tools to support them that may be used in the development of software.

1.3.1 COMPUTER SCIENCE – AN INTRODUCTION

Computer is a device that transforms data into meaningful information. The computer performs basically five major operations of functions irrespective of their size and make. These are 1) it accepts data or instruction by way of input, 2) it stores data, 3) it can process data as required by the user, 4) it gives results in the form of output, and 5).

The history of computers starts out about 2000 years ago in Babylonia (Mesopotamia), at the birth of the abacus, a wooden rack holding two horizontal wires with beads strung on them. This first mechanical calculator, called the Pascaline. Early in the 50s two important engineering discoveries changed the image of the electronic - computer field. These discoveries were the magnetic core memory and the Transistor - Circuit Element. By the late 1980s, some

[1] A brief history of software technology by Cheristof Ebert.

personal computers were run by microprocessors that, handling 32 bits of data at a time, could process about 4,000,000 instructions per second.[2]

TRUING MACHINE

One of the founding principles behind the modern computing is the concept of Turing machines[3]. Turing machines, along with several other models, are vital for representing the underlying logic behind all computers. A Turing machine (which are theoretical constructs) is an abstract concept used to describe a type of machine that, given an indefinite amount of space and time, can be adapted to calculate anything, even a whole universe. A simple Turing machine consists of a tape of a theoretically infinite size consisting of cells, or sections on the tape. Each cell holds on it a symbol, which is written to it by the head, and which modified the current state of the machine.[4]

COMPONENT OF ACOMPUTER

A computer consist of hardware and software. A computer needs something that gives that hardware set of instructions that tell it what to do. This is what the software is used for. The internal hardware provides three main functions. First, it provides processing functionality. The main processing unit in computer is the Central Processing Unit (CPU). Second functionality is short term data storage.

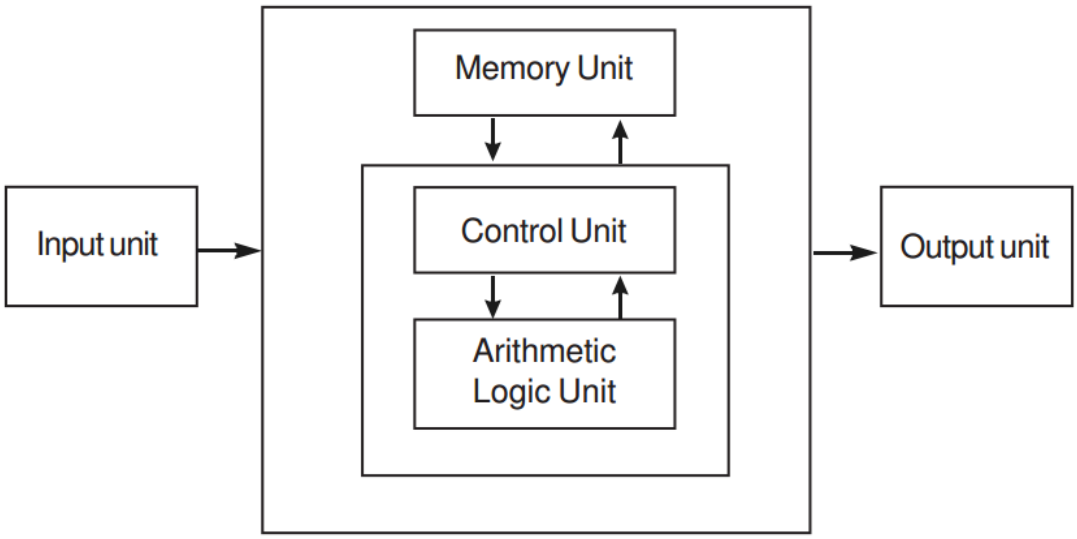

FIGURE – 1. ORGANIGATION OF A COMPUTER

This is done using Random Access Memory or RAM. For long-term storage we use a variety of storage mediums. The most important one is the Hard Disk Drive or HDD.

[2] For detail see Unit- 3; OWERVIEW ON COMPUTER AND WEB TECHNOLOGY
[3] Name after the computer scientist, Alan Turing, who first conceived Truing machine.
[4] https://en.wikiversity.org/wiki/Introduction_to_Turing_Machines

There are three main sources of input- Keyboard, Mouse, Touchscreen. To get information out of the computer we need to have output devices connected to it. For example-Monitor, Audio, Printer, Plotter.[5]

KERNALS

An important piece of software for computer is called the kernel. The kernel helps the CPU. RAM, hard drive and other devices all talk to each other. A kernel connects the application software to the hardware of a computer.(figure 2)

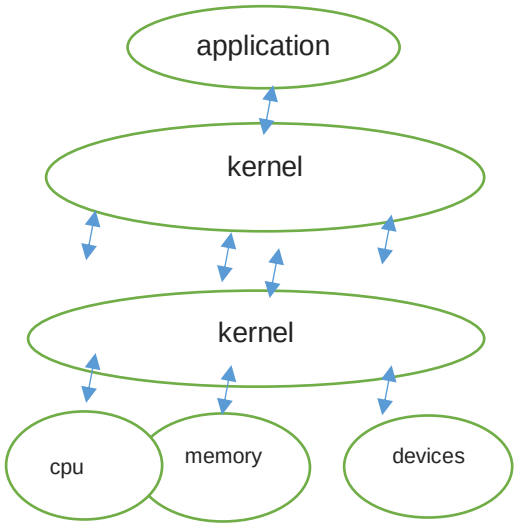

FIGURE - 2

The kernel is a computer program that is the core of a computer's operating system. It has complete control over everything in the system. Mostly, after the bootloader, it is one of the first programs loaded on start-up. It handles the rest of start-up as well as input/output requests from software, translating them into data-processing instructions for the central processing unit. It handles memory and peripherals like keyboards, monitors, printers, and speakers. The kernel performs its tasks, such as running processes, managing hardware devices such as the hard disk, and handling interrupts, in this protected kernel space.[6]

1.3.1.1 INTERNET

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link billions of devices worldwide. A web browser (commonly referred to as a browser) is a software application for retrieving, presenting and traversing

[5] For detail see Unit- 3; OWERVIEW ON COMPUTER AND WEB TECHNOLOGY
[6] https://en.wikipedia.org/wiki/Kernel_(operating_system)

information resources on the World Wide Web[7]. A web search engine[8] is a software system that is designed to search for information on the World Wide Web.

Electronic mail (email or e-mail) is a method of exchanging messages between people using electronic devices. Email first entered limited use in the 1960s and by the mid-1970s had taken the form now recognized as email. Email operates across computer networks, which today is primarily the Internet. Some early email systems required the author and the recipient to both be online at the same time, in common with instant messaging. Today's email systems are based on a store-and-forward model. Email servers accept, forward, deliver, and store messages. Neither the users nor their computers are required to be online simultaneously; they need to connect only briefly, typically to a mail server or a webmail interface, for as long as it takes to send or receive messages.[9]

Social media, which is a most popular platform for youth of today, are computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. Examples are: Facebook, WhatsApp, Instagram, YouTube etc.

Internet communications services, incuded Voice over IP, file transfer, file sharing, and screen sharing. Voice over Internet Protocol (also voice over IP, VoIP or IP telephony) is a methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. The terms Internet telephony, broadband telephony, and broadband phone service specifically refer to the provisioning of communications services (voice, fax, SMS, voice-messaging) over the public Internet, rather than via the public switched telephone network (PSTN). Instead of being transmitted over a circuit-switched network, VoIP information is packetized, and transmission occurs as IP packets over a packet-switched network. VoIP is available on dedicated phones, smartphones, personal computers, and Internet access devices. Calls and SMS text messages may be sent over 3G/4G or Wi-Fi. The File Transfer Protocol (FTP) is a standard network protocol used for the transfer of computer files between a client and server on a computer network.

A computer network or data network is a digital telecommunications network that allows computers to exchange data. Networked computing devices pass data to each other in the form of packets across connections established using either cable or wireless media. A router is a device that forwards data packets between different computer networks based on network address (IP address). A modem is a device used to connect network nodes via wire not originally designed for digital network traffic, by modulating the digital signal to produce an analog signal for transmission. A firewall is a device used to control network security and access rules by rejecting access requests from unrecognized sources while allowing actions from recognized ones.[10]

[7] For detail on world wide wab see Unit- 3; OWERVIEW ON COMPUTER AND WEB TECHNOLOGY
[8] Ibid.
[9] https://en.wikipedia.org/wiki/Email
[10] https://en.wikiversity.org/wiki/Internet_Fundamentals/Networking

The Internet represents an insecure channel for exchanging information leading to a high risk of intrusion or fraud, such as phishing, online viruses, trojans, worms, and more. A computer user can be tricked or forced into downloading software onto a computer that is of malicious intent. Internet security is a branch of computer security specifically related to the Internet, often involving browser security but also network security on a more general level, as it applies to other applications or operating systems as a whole. Its objective is to establish rules and measures to use against attacks over the Internet. **Malware,** (malicious software) is any software used to disrupt computer operation, gather sensitive information, or gain access to private computer systems. Malware does not include software that causes unintentional harm due to some deficiency. The term badware is sometimes used, and applied to both true (malicious) malware and unintentionally harmful software. A **botnet** is a network of zombie computers that have been taken over by a robot or bot that performs large-scale malicious acts for the creator of the botnet. **Computer Viruses** are programs that can replicate their structures or effects by infecting other files or structures on a computer. The common use of a virus is to take over a computer to steal data. **Computer worms** are programs that can replicate themselves throughout a computer network, performing malicious tasks throughout. **Ransomware** is a type of malware which restricts access to the computer system that it infects, and demands a ransom paid to the creator(s) of the malware in order for the restriction to be removed. **Scareware** is scam software with malicious payloads, usually of limited or no benefit that are sold to consumers via certain unethical marketing practices. The selling approach uses social engineering to cause shock, anxiety, or the perception of a threat, generally directed at an unsuspecting user. **Spyware** refers to programs that surreptitiously monitor activity on a computer system and report that information to others without the user's consent. A **Trojan horse**, commonly known as a Trojan, is a general term for malicious software that pretends to be harmless, so that a user willingly allows it to be downloaded onto the computer. **KeyLogger, Keystroke logging**, often referred to as keylogging or keyboard capturing, is the action of recording (logging) the keys struck on a keyboard. A **denial-of-service attack** (DoS attack) or distributed denial-of-service attack (DDoS attack) is an attempt to make a computer resource unavailable to its intended users. **Phishing** occurs when the attacker pretends to be a trustworthy entity, either via email or web page.[11]

Antivirus software and Internet security programs can protect a programmable device from attack by detecting and eliminating viruses. A password manager is a software application that helps a user store and organize passwords.[12]

Hypertext Markup Language (HTML)[13] is the standard markup language for creating web pages and web applications. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Along with HTML and JavaScript, CSS is a

[11] https://en.wikiversity.org/wiki/Internet_Fundamentals/Security
[12] Ibid.
[13] For detail see Unit- 3; OWERVIEW ON COMPUTER AND WEB TECHNOLOGY

cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications. Alongside HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content engineering. It is used to make webpages interactive and provide online programs, including video games.

Computer graphics are pictures and films created using computers. Computer graphic development has had a significant impact on many types of media and has revolutionized animation, movies, advertising, video games, and graphic design generally. Computer animation is the art of creating moving images via the use of computers. **Multimedia**[14] is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content.[15]

A database is an organized collection of data. A relational database is a collection of schemas, tables, queries, reports, views, and other elements. A database-management system (DBMS) is a computer-software application that interacts with end-users, other applications, and the database itself to capture and analyze data.[16]

The **World Wide Web** (abbreviated WWW or the Web) is an information space where documents and other web resources are identified by Uniform Resource Locators (URLs), interlinked by hypertext links, and can be accessed via the Internet. A **hyperlink,** or simply a link, is a reference to data that the reader can directly follow either by clicking, tapping, or hovering. A hyperlink points to a whole document or to a specific element within a document. Hypertext is text with hyperlinks. A software system that is used for viewing and creating hypertext is a hypertext system, and to create a hyperlink is to hyperlink (or simply to link). A user following hyperlinks is said to navigate or browse the hypertext. The main document, which contain a hyperlink is known as source document. Hyperlinks are often used to implement reference mechanisms such as tables of contents, footnotes, bibliographies, indexes, letters and glossaries. A hyperlink are of two types- inline links and anchor.

An **inline link** displays remote content without the need for embedding the content. The remote content may be accessed with or without the user selecting the link.

An **anchor hyperlink** is a link bound to a portion of a document, generally text, though not necessarily. For example, a political map of Africa may have each country hyperlinked to further information about that country.[17]

Web Design is technology with the creativity of design. Web Development is the process of creating websites with functionality above and beyond displaying static content. While Web Design is concerned with the layout, look and feel and aesthetics of a website, Web

[14] Ibid.
[15] https://en.wikiversity.org/wiki/Internet_Fundamentals/Graphics_and_Multimedia
[16] https://en.wikiversity.org/wiki/Internet_Fundamentals/Databases
[17] https://en.wikipedia.org/wiki/Hyperlink

Development is concerned with how that content is delivered, where it is stored, who can edit it, and what viewers can do with it.

1.3.1.2 SOFTWARE

A Computer contains two part: software and hardware. Software consists of data or computer instructions, in contrast to the physical hardware from which the system is built. Computer hardware and software require each other and neither can be realistically used on its own.

Mostly software is written in high-level programming languages that are closer to natural languages which make it easier for programmers to use more efficiently than machine languages. High-level languages are translated into machine language using a compiler or an interpreter or a combination of the two. Software may also be written in a low-level assembly language, which has strong correspondence to the computer's machine language instructions and is translated into machine language using an assembler.[18]

Application software perform special functions or provide entertainment functions beyond the basic operation of the computer itself. Application software may be general purpose (word processing, web browsers, etc.) or have a specific purpose (accounting, truck scheduling, etc.).

System software directly operates the computer hardware, to provide basic functionality needed by users and other software, and to provide a platform for running application software. System software includes operating systems, device drivers and utilities.

Operating systems which are essential collections of software that manage resources and provides common services for other software that runs "on top" of them. Supervisory programs, boot loaders, shells and window systems are core parts of operating systems. Device drivers
which operate or control a particular type of device that is attached to a computer. For example when we attach a printer to our computer, we need a driver to run the printer. A computer typically needs more than one device driver. Utility software is written in high level programming language, which are computer programs designed to assist users in the maintenance and care of their computers.

Malicious software or malware which is software that is developed to harm and disrupt computers. Malware is closely associated with computer-related crimes. In fact, these are undesirable software.

Server software, including Web applications, which usually run on the web server and output dynamically generated web pages to web browsers, using e.g. PHP, Java, ASP.NET, or even JavaScript that runs on the server. In modern times these commonly include some JavaScript to be run in the web browser as well, in which case they typically run partly on the server, partly in the web browser.

[18] https://en.wikipedia.org/wiki/Software

Plugins and extensions are software that extends or modifies the functionality of another piece of software, and require that software be used in order to function;

Embedded software resides as firmware within embedded systems, devices dedicated to a single use or a few uses such as cars and televisions. In the embedded system context there is sometimes no clear distinction between the system software and the application software. However, some embedded systems run embedded operating systems, and these systems do retain the distinction between system software and application software. Microcode is a special, relatively obscure type of embedded software which tells the processor itself how to execute machine code, so it is actually a lower level than machine code.

Programming tools are also software in the form of programs or applications that software developers (also known as programmers, coders, hackers or software engineers) use to create, debug, maintain (i.e. improve or fix), or otherwise support software.

Software is written in one or more programming languages. There are many programming languages in existence, and each has at least one implementation, each of which consists of its own set of programming tools. These tools may be relatively self-contained programs such as compilers, debuggers, interpreters, linkers, and text editors, that can be combined together to accomplish a task; or they may form an integrated development environment (IDE), which combines much or all of the functionality of such self-contained tools. IDEs may do this by either invoking the relevant individual tools or by re-implementing their functionality in a new way. An IDE can make it easier to do specific tasks, such as searching in files in a particular project. Many programming language implementations provide the option of using either individual tools or an IDE.

Computer software has to be "loaded" into the computer's storage i.e. the hard drive or memory. Once the software has loaded, the computer is able to execute the software. This involves passing instructions from the application software, through the system software, to the hardware which ultimately receives the instruction as machine code. Each instruction causes the computer to carry out an operation—moving data, carrying out a computation, or altering the control flow of instructions.

Software quality is very important, especially for commercial and system software like Microsoft Office, Microsoft Windows and Linux. If software is faulty (buggy), it can delete a person's work, crash the computer and do other unexpected things. Faults and errors are called "bugs" which are often discovered during alpha and beta testing. Software is often also a victim to what is known as software aging, the progressive performance degradation resulting from a combination of unseen bugs.

Many bugs are discovered and eliminated (debugged[19]) through software testing. However, software testing rarely if ever eliminates every bug. Some programmers say that "every program has at least one more bug". In the waterfall method of software development, separate testing teams are typically employed, but in newer approaches, collectively termed agile software development, developers often do all their own testing, and demonstrate the software

[19] See glossary

to users/clients regularly to obtain feedback. Software can be tested through unit testing, regression testing and other methods, which are done manually, or most commonly, automatically, since the amount of code to be tested can be quite large. For instance, NASA has extremely rigorous software testing procedures for many operating systems and communication functions. Many NASA-based operations interact and identify each other through command programs. This enables many people who work at NASA to check and evaluate functional systems overall. Programs containing command software enable hardware engineering and system operations to function much easier together.

The software's license gives the user the right to use the software in the licensed environment, and in the case of free software licenses, also grants other rights such as the right to make copies. Design and implementation of software varies depending on the complexity of the software. For instance, the design and creation of Microsoft Word took much more time than designing and developing Microsoft Notepad because the latter has much more basic functionality. A person who creates software is called a programmer, software engineer or software developer, terms that all have a similar meaning. More informal terms for programmer also exist such as "coder" and "hacker" – although use of the latter word may cause confusion, because it is more often used to mean someone who illegally breaks into computer systems.[20]

1.3.2 ALGORITHM AND CODING

The concept of algorithm is at the very core of computer science. An algorithm is the step-by-step solution to a certain problem. It is seen impossible for a human to write out an infinite series of things, but humans are able to create a process by which a computer can generate the portions of that series which are relevant to solving a particular problem. The specific list of steps thus created constitutes an algorithm. Algorithms are a series of step by step instructions for solving a problem. Pseudo code is an algorithm written in a way that resembles computer code. In mathematics and computer science, an algorithm is a clear specification of how to solve a class of problems. Algorithms can perform calculation, data processing and automated reasoning tasks.

Automated reasoning is an area of computer science and mathematical logic dedicated to understanding different aspects of reasoning. The study of automated reasoning helps produce computer programs that allow computers to reason completely, or nearly completely, automatically. Although automated reasoning is considered a sub-field of artificial intelligence, it also has connections with theoretical computer science, and even philosophy. A computer program is nothing, but a collection of instructions that performs a specific task when executed by a computer. A computer requires programs to function. A part of a computer program that performs a well-defined task is known as an algorithm. A collection of computer programs, libraries, and related data are referred to as software. Computer programs may be categorized along functional lines, such as application software and system software.

[20] https://en.wikipedia.org/wiki/Software

Algorithm is a set of rules that precisely defines a sequence of operations, which would include all computer programs, including programs that do not perform numeric calculations. Algorithms are essential to the way computers process data. Many computer programs contain algorithms that detail the specific instructions a computer should perform (in a specific order) to carry out a specified task, such as calculating employees' paychecks or printing students' report cards. In computer systems, an algorithm is basically an instance of logic[21] written in software by software developers to be effective for the intended "target" computer(s) to produce output from given input.[22]

Coding may refer to Computer programming, the process of designing, writing, testing, debugging or troubleshooting, and maintaining the source code of computer programs (C++ is an example of a compile language for programing). **Computer programming** is a process that leads from an original formulation of a computing problem to executable computer programs. Programming involves activities such as analysis, developing understanding, generating algorithms, verification of requirements of algorithms including their correctness and resources consumption, and implementation (commonly referred to as **coding**) of algorithms in a target programming language. Source code is written in one or more programming languages. The purpose of programming is to find a sequence of instructions that will automate performing a specific task or solving a given problem. The process of programming thus often requires expertise in many different subjects, including knowledge of the application domain, specialized algorithms, and formal logic.

1.3.2.1 SOFTWARE DEVELOPMENT

Computer programming related tasks include testing, debugging, and maintaining the source code, implementation of the build system, and management of derived artifacts such as machine code of computer programs. This is often term as software development. Software engineering combines engineering techniques with software development practices. **Software Engineering** is the application of engineering to the development of software in a systematic method. Software development is a long and wide process which includes a team work and includes the following stages-

- Analyzing the problem
- Market research

[21] In the 1950s and 1960s, researchers predicted that when human knowledge could be expressed using logic with mathematical notation, it would be possible to create a machine that reasons, or artificial intelligence. This was more difficult than expected because of the complexity of human reasoning. In logic programming, a program consists of a set of axioms and rules. Logic programming systems such as Prolog compute the consequences of the axioms and rules in order to answer a query. Today, logic is extensively applied in the fields of artificial intelligence and computer science, and these fields provide a rich source of problems in formal and informal logic. Argumentation theory is one good example of how logic is being applied to artificial intelligence.(https://en.wikipedia.org/wiki/Logic)

[22] Wikipedia

- Gathering requirements for the proposed business solution
- Devising a plan or design for the software-based solution
- Implementation (coding) of the software
- Testing the software
- Deployment
- Maintenance and bug fixing

After establishing the requirements, the design of the software can be established in a software design document. Software design may refer to either all the activity involved in conceptualizing, framing, implementing, commissioning, and ultimately modifying complex systems or the activity following requirements specification and before programming, as in a stylized software engineering process.

Software design usually involves problem solving and planning a software solution. This includes both a low-level component and algorithm design and a high-level, architecture design.

Software design is the process of implementing software solutions to one or more sets of problems. One of the main components of software design is the software requirements analysis (SRA). SRA is a part of the software development process that lists specifications used in software engineering.

Implementation is the part of the process where software engineers actually program the code for the project. Software testing is an integral and important phase of the software development process. This part of the process ensures that defects are recognized as soon as possible. In some processes, generally known as test-driven development, tests may be developed just before implementation and serve as a guide for the implementation's correctness. For the purpose of future maintenance and enhancement, documenting the internal design of software is done throughout development. This may also include the writing of an API, be it external or internal. The software engineering process chosen by the developing team will determine how much internal documentation (if any) is necessary. Plan-driven models (e.g., Waterfall[23]) generally produce more documentation than Agile[24] models.

Software training and support is important, as software is only effective if it is used correctly.

Maintaining and enhancing software to cope with newly discovered faults or requirements can take substantial time and effort, as missed requirements may force redesign of the software.

In the field of software engineering, Computer-aided software engineering (CASE) is the scientific application of a set of software tools and methods to the development of software which results in high-quality, defect-free, and maintainable software products. It

[23] The **waterfall model** is a relatively linear sequential design approach for certain areas of engineering design. In software development, it tends to be among the less iterative and flexible approaches, as progress flows in largely one direction ("downwards" like a waterfall) through the phases of conception, initiation, analysis, design, construction, testing, deployment and maintenance. (https://en.wikipedia.org/wiki/Waterfall_model)

[24] **Agile software development** describes an approach to software development under which requirements and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customer(s)/end user(s).[1] It advocates adaptive planning, evolutionary development, early delivery, and continual improvement, and it encourages rapid and flexible response to change. (https://en.wikipedia.org/wiki/Agile_software_development)

also refers to methods for the development of information systems together with automated tools that can be used in the software development process. The term "computer-aided software engineering" (CASE) can refer to the software used for the automated development of systems software, i.e., computer code. The CASE functions include analysis, design, and programming. CASE tools automate methods for designing, documenting, and producing structured computer code in the desired programming language. CASE foster computer assistance in software development and software maintenance processes. Also it is an engineering approach to software development and maintenance.

An integrated development environment (IDE) also known as integrated design environment or integrated debugging environment is a software application that provides comprehensive facilities to computer programmers for software development. An IDE normally consists of: 1) **Source code editor**, which is a text editor program designed specifically for editing source code of computer programs by programmers. It may be a standalone application or it may be built into an integrated development environment (IDE) or web browser. Source code editors are the most fundamental programming tool, as the fundamental job of programmers is to write and edit source code. Example are: Atom, Brackets, Eclipse, Emacs (cross-platform, including Unix, Linux, macOS, Windows), Gedit (cross-platform, including Linux, macOS, Windows), Microsoft Visual Studio built-in editor (Windows), NetBeans, Notepad++ (Windows). 2) **Compiler or interpreter**, which is a computer software that transforms computer code written in one programming language (the source language) into another programming language (the target language). Compilers are a type of translator that support digital devices, primarily computers. The name compiler is primarily used for programs that translate source code from a high-level programming language to a lower level language (e.g., assembly language, object code, or machine code) to create an executable program. In computer science, an **interpreter** is a computer program that directly executes, i.e. performs, instructions written in a programming or scripting language, without requiring them previously to have been compiled into a machine language program. An interpreter generally uses one of the following strategies for program execution:

1. parse the source code and perform its behavior directly;
2. translate source code into some efficient intermediate representation and immediately execute this;
3. explicitly execute stored precompiled code[1] made by a compiler which is part of the interpreter system

3)Build automation tools, **which** is the process of automating the creation of a software build and the associated processes including: compiling computer source code into binary code, packaging binary code, and running automated tests. 4) **Debugger**: A **debugger** or **debugging tool** is a computer program that is used to test and debug other programs (the "target" program). The code to be examined might alternatively be running on an instruction set simulator (ISS), a technique that allows great power in its ability to halt when specific conditions are encountered, but which will typically be somewhat slower than executing the code directly on the appropriate (or the same)

processor. Some debuggers offer two modes of operation, full or partial simulation, to limit this impact.

A "trap" occurs when the program cannot normally continue because of a programming bug or invalid data. For example, the program might have tried to use an instruction not available on the current version of the CPU or attempted to access unavailable or protected memory. When the program "traps" or reaches a preset condition, the debugger typically shows the location in the original code if it is a **source-level debugger** or **symbolic debugger**, commonly now seen in integrated development environments. If it is a **low-level debugger** or a **machine-language debugger** it shows the line in the disassembly (unless it also has online access to the original source code and can display the appropriate section of code from the assembly or compilation).

IDEs are designed to maximize programmer productivity by providing tight-knit components with similar user interfaces. Typically an IDE is dedicated to a specific programming language, so as to provide a feature set which most closely matches the programming paradigms of the language.

1.3.2.2 MODELING LANGUAGE

A modeling language is any artificial language that can be used to express information or knowledge or systems in a structure that is defined by a consistent set of rules. The rules are used for interpretation of the meaning of components in the structure. A modeling language can be graphical or textual. Graphical modeling languages use a diagram techniques with named symbols that represent concepts and lines that connect the symbols and that represent relationships and various other graphical annotation to represent constraints. Textual modeling languages typically use standardized keywords accompanied by parameters to make computer-interpretable expressions. Examples of graphical modelling languages in the field of software engineering are:

- Business Process Modeling Notation (BPMN, and the XML form BPML) is an example of a process modeling language.

- EXPRESS and EXPRESS-G (ISO 10303-11) is an international standard general-purpose data modeling language.
- Extended Enterprise Modeling Language (EEML) is commonly used for business process modeling across layers.
- Flowchart is a schematic representation of an algorithm or a stepwise process,
- Fundamental Modeling Concepts (FMC) modeling language for software-intensive systems.[25]
- IDEF is a family of modeling languages, the most notable of which include IDEF0 for functional modeling, IDEF1X for information modeling, and IDEF5 for modeling ontologies.
- LePUS3 is an object-oriented visual Design Description Language and a formal specification language that is suitable primarily for modelling large object-oriented (Java, C++, C#) programs and design patterns.

[25] https://en.wikipedia.org/wiki/Software_development

- Specification and Description Language (SDL) is a specification language targeted at the unambiguous specification and description of the behavior of reactive and distributed systems.
- Unified Modeling Language (UML) is a general-purpose modeling language that is an industry standard for specifying software-intensive systems. UML 2.0, the current version, supports thirteen different diagram techniques and has widespread tool support.

Not all modeling languages are executable, and for those that are, using them doesn't necessarily mean that programmers are no longer needed. On the contrary, executable modeling languages are intended to amplify the productivity of skilled programmers, so that they can address more difficult problems, such as parallel computing and distributed systems.

A programming paradigm is a fundamental style of computer programming, which is not generally dictated by the project management methodology (such as waterfall or agile). Paradigms differ in the concepts and abstractions used to represent the elements of a program (such as objects, functions, variables, constraints) and the steps that comprise a computation (such as assignations, evaluation, continuations, data flows). A programming language can support multiple paradigms. For example, programs written in C++ or Object Pascal can be purely procedural, or purely object-oriented, or contain elements of both paradigms. Just as different groups in software engineering advocate different methodologies, different programming languages advocate different programming paradigms. Some languages are designed to support one paradigm, while other programming languages support multiple paradigms.[26]

1.3.2.3 PROGRAMMING TECHNIQUES

Designing of a software is a complex method. It involves technology and art both. The market of software designing is very big and expands continuously. The aim of designing may vary. Some are following: what are the objects of designing.

With the advancement of technology the maintenance cost of old system may raising high and the efficiency of old system decreases. Hence the solution is to replace old one to new system.

- There may be demand from an institution or company to develop a software, which meet there requirement.
- Enhance productivity of any company or working group may be another aim for developing new software.
- To cope up with competition, there may be need of advance software.

1.3.2.3.1 STRUCTURED PROGRAMMING

Structured programming is a logical programming method that is considered a precursor to object-oriented programming (OOP). The program is divided into several basic structures. These structures are called building blocks. Programs are easier to read and understand. Errors

[26] Ibid

are more easily found. In structure programming various control structures such as switch-case, if-then-else, while, etc. allows a programmer to decode the flow of the program easily.

It is called **"**goto less" programming because use of *goto* for unconditional branching is strongly avoided. The goto is a sign of poor program design, so many designing concepts are not favoring it but it is used in all programming language widely. The disadvantage is that, more memory space is required. When the numbers of modules are out of certain range, performance of program is not satisfactory.[27]

1.3.2.3.2 MODULAR PROGRAMMING

In Modular programming the design is subdivided into smaller parts called modules or skids that can be independently created and then used in different systems. It is logically separable part of program. Modules are independent and easily manageable. Modules are debugged and tested separately and combined to build system. The top module is called root or boss modules which charges control over all sub-modules from top to bottom. The control flows from top to bottom, but not from bottom to top.

1.3.2.3.3 TOP DOWN DESIGN

A top-down approach, also known as stepwise design is essentially the breaking down of a system to gain insight into the sub-systems that make it up. In a top-down approach an overview of the system is formulated, specifying but not detailing any first-level subsystems. Sometimes it known as the American approach, because it was the approach adopted by the FBI (Federal Bureau of Investigation) in the 1970s. It begins by looking carefully at the crime scene and drawing conclusions from the evidence found there about the offender.

In top down approach, first of all, supervisor program is identified to control other sub modules. Main modules are divided into sub modules, sub-modules into sub- sub- modules and so on. The decomposition of modules is continuing whenever desired module level is not obtained. Top module is tested first, and then sub-modules are combined one by one and tested.

1.3.2.3.4 BOTTOM UP APROACH

In this method of planning, defining objectives and ways to achieve them through the bottom up. First, relatively close targets at lower levels of the organizational hierarchy are set. They are then gradually integrated into the framework of global goals and global strategy at higher and higher. At first bottom layer modules are designed and tested then second layer modules are designed and combined with bottom layer and combined modules are tested. In this way, designing and testing progressed from bottom to top. However in software designing not one type of designing is used i.e. only pure top down or Bottom up approach. The hybrid type of approach is recommended by many designers in which top down and bottom up, both approaches are utilized.[28]

[27] http://www.sciencehq.com/computing-technology/programming-techniques.html
[28] Ibid

1.3.2.3.5 OBJECT ORIENTED PROGRAMMING

In OOP emphasis given on objects, not on procedures. All the programming activities revolve around objects. It supports bottom up approach of programming. Four principles of OOP are encapsulation, abstraction, inheritance and polymorphism. The use of essential features over less essential features is called abstraction**.** In OOP, there are many devices used for data abstraction such as class, encapsulation, data hiding etc. A class is a collection of similar objects. Objects are members of class. Once a class is declared, its many members can be easily created in programs. The ability to find in many forms is called polymorphism. For instance, + is mathematical operator, it linked together and give numbers. Here, operator + has different behavior for numerical data and strings. Just like it, once declared function has different meaning that is called function overloading**.** If operator has different meaning, it is called operator overloading. The encapsulation is a very unusual feature of OOP in which data and function is bound into single unit. Encapsulation is the mechanism of hiding of data implementation by restricting access to public methods. The data and function are encapsulated into class. External world or external function cannot access the data. It hides private elements of objects behind public interface. Inheritance is a hierarchy of class in which some properties of base class is transferred to derived class.

1.3.3 COMPUTER NETWORKING

A **computer network**, or **data network**, is a digital telecommunications network which allows nodes to share resources. A physical network node may be DCE (data communication equipment) such as a modem, hub, bridge or switch; or data terminal equipment (DTE) such as a digital telephone handset, a printer or a host compute. Network computer devices that originate, route and terminate the data are called network nodes. Nodes can include hosts such as personal computers, phones, servers as well as networking hardware. When one device is able to exchange information with the other device, whether or not they have a direct connection to each other, can be said to be networked together. In most cases, application-specific communications protocols[29] are layered (i.e. carried as payload) over other more general communications protocols. This formidable collection of information technology requires skilled network management to keep it all running reliably.

Computer networks support an enormous number of applications and services such as access to the World Wide Web, digital video, digital audio, shared use of application and storage servers, printers, and fax machines, and use of email and instant messaging applications as well as many others. Computer networks differ in the transmission medium used to carry their signals, communications protocols to organize network traffic, the network's size, topology, traffic control mechanism and organizational intent. The best-known computer network is the Internet, which convert all world into a village. Interpersonal communications, facilitating by computer network, allowing users to communicate efficiently and easily via email, instant messaging, online chat, telephone, video telephone calls, and video conferencing. A network allows sharing of files, data, and other types of information. It gives authorized users the ability to access information stored on other computers on the network. A

[29] See glossary

computer network may be used by security hackers to deploy computer viruses or computer worms on devices connected to the network, or to prevent these devices from accessing the network via a denial-of-service attack[30].

Most information in computer networks is carried in packets. A network packet is a formatted unit of data (a list of bits or bytes, usually a few tens of bytes to a few kilobytes long) carried by a packet-switched network. Packets are sent through the network to their destination. Once the packets arrive they are reassembled into their original message.

In computer networks, the exchange of data between computing devices are using connections between nodes. These nodes or data links are established over wired or wireless media.

Write the short notes on the following: 1.3.3

Wired technologies:

- Coaxial cable is widely used for cable television systems, office buildings, and other work-sites for local area networks. Transmission speed ranges from 200 million bits per second to more than 500 million bits per second.
- ITU-T G.hn technology uses existing home wiring (coaxial cable, phone lines and power lines) to create a high-speed (up to 1 Gigabit/s) local area network
- Twisted pair wire is the most widely used medium for all telecommunication. Computer network cabling (wired Ethernet as defined by IEEE 802.3) consists of 4 pairs of copper cabling that can be utilized for both voice and data transmission. The transmission speed ranges from 2 million bits per second to 10 billion bits per second.
- An optical fiber is a glass fiber. It carries pulses of light that represent data. Optical fibers can simultaneously carry multiple wavelengths of light, which greatly increases the rate that data can be sent, and helps enable data rates of up to trillions of bits per second. Optic fibers can be used for long runs of cable carrying very high data rates, and are used for undersea cables to interconnect continents.

Wireless technologies:

- Terrestrial microwave – Terrestrial microwave communication uses Earth-based transmitters and receivers resembling satellite dishes.
- Communications satellites – Satellites communicate via microwave radio waves, which are not deflected by the Earth's atmosphere. The satellites are stationed in space, typically in geosynchronous orbit 35,400 km (22,000 mi) above the equator. These Earth-orbiting systems are capable of receiving and relaying voice, data, and TV signals.
- Cellular and PCS systems use several radio communications technologies. The systems divide the region covered into multiple geographic areas. Each area has a low-power transmitter or radio relay antenna device to relay calls from one area to the next area.

[30] Denial-of-service attack (DoS attack) is a cyber-attack in which the perpetrator seeks to make a machine or network resource unavailable to its intended users by temporarily or indefinitely disrupting services of a host connected to the Internet. (Wikipedia)

- Radio and spread spectrum technologies – Wireless local area networks use a high-frequency radio technology similar to digital cellular and a low-frequency radio technology. Wireless LANs use spread spectrum technology to enable communication between multiple devices in a limited area. IEEE 802.11 defines a common flavor of open-standards wireless radio-wave technology known as Wifi.
- Free-space optical communication uses visible or invisible light for communications. In most cases, line-of-sight propagation is used, which limits the physical positioning of communicating devices.

A Local Area Network (LAN) network connects computers and devices in a limited geographical area such as a home, school, office building, or closely positioned group of buildings. A LAN can be connected to a WAN (wide area network) using a router.

A wide area network (WAN) is a computer network that covers a large geographic area such as a city, country, or spans even intercontinental distances. WAN technologies generally function at the lower three layers of the OSI reference model [**Open Systems Interconnection model** (**OSI model**)], these are, the physical layer, the data link layer, and the network layer. The **Open Systems Interconnection model** (**OSI model**) is a conceptual model that characterizes and standardizes the communication functions of a computing system without regard to its underlying internal structure and technology. Its goal is the interoperability of diverse communication systems with standard protocols.

A home Area Network (HAN) is a residential LAN used for communication between digital devices typically deployed in the home, usually a small number of personal computers and accessories, such as printers, mobile and iPad. In HAN Internet access is often a broadband service through a cable TV digital subscriber line (DSL) provider.

A storage area network (SAN) is a dedicated network that provides access to consolidated, block level data storage.

A campus area network (CAN) is, as the name suggest, made up of an interconnection of LANs within a limited geographical area. Examples are an enterprise, university, government, etc.

A back network is part of a computer network infrastructure that provides a path for the exchange of information between different LANs or sub-networks. For example, a large company might implement a backbone network to connect departments that are located around the world.

An enterprise private area is a network that a single organization builds to interconnect its office locations.

A virtual private network (VPN) is an overlay network in which some of the links between nodes are carried by open connections or virtual circuits in some larger network (e.g., the Internet) instead of by physical wires. VPNs, for example, can be used to separate the traffic of different user communities over an underlying network with strong security features.

A global area network (GAN) is a network used for supporting mobile across an arbitrary number of wireless LANs, satellite coverage areas, etc. The key challenge in mobile communications is handing off user communications from one local coverage area to the next.

Networks are typically managed by the organizations that own them. Private enterprise networks may use a combination of intranets and extranets. They may also provide network access to the internet, which has no single owner and permits virtually unlimited global connectivity.[31]

A **darknet** is an overlay network, typically running on the Internet that is only accessible through specialized software. A darknet is an anonymizing network where connections are made only between trusted peers — sometimes called "friends" (F2F) — using non-standard protocols and ports. A friend-to-friend or F2F computer network is a type of peer to peer network in which users only make direct connections with people they know. Passwords or digital signature can be used for authentication. Darknet are distinct from other distributed peer to peer networks as sharing is anonymous (that is, IP address are not publicly shared), and therefore users can communicate with little fear of governmental or corporate interference.

Routing is the process of selecting network paths to carry network traffic. Routing is performed for many kinds of networks, including circuit switching networks and packet switching networks.

In packet switched networks, routing directs network packets from their source toward their ultimate destination through intermediate nodes. Intermediate nodes are typically network hardware devices such as routers, bridges, gateways, firewalls, or switches. General-purpose computers can also forward packets and perform routing, though they are not specialized hardware and may suffer from limited performance. There are usually multiple routes that can be taken, and to choose between them, different elements can be considered to decide which routes get in

Network congestion occurs when a link or node is carrying so much data that its quality of service deteriorates. Network congestion is the reduced quality of service that occurs when a network node or link is carrying more data than it can handle. Congestion collapse is the condition in which congestion prevents or limits useful communication. Congestion collapse generally occurs at choke points in the network, where incoming traffic exceeds outgoing bandwidth. Connection points between a LAN and a WAN are common choke points. Networks use congestion control and congestion avoidance techniques to try to avoid collapse.

1.3.4 NETWORK SECURITY

To prevent and monitor unauthorized access, misuse, modification, or denial of the computer network and its network-accessible resources, different security measures are taken by users? 1.3.4 Adopted by network administrators. Network security is the authorization of access to data in a network, which is controlled by the network administrator. Users are assigned an ID

[31] https://en.wikipedia.org/wiki/Computer_network

and password that allows them access to information and programs within their authority. Network security is used on public and private computer networks, to secure daily transactions and communications among businesses, government agencies and individuals.

Network surveillance

Monitoring of data being transferred over computer networks is called network surveilliance. The monitoring is often done surreptitiously and may be done by or at the behest of governments, by corporations, criminal organizations, or individuals. It may or may not be legal and may or may not require authorization from a court or other independent agency.

Computer and network surveillance programs are widespread today, and almost all Internet traffic is or could potentially be monitored for clues to illegal activity.

Surveillance is very useful to governments and law enforcement agencies to maintain social harmony, recognize and monitor threats, and prevent or investigate anti-social or criminal activities. With the advent of programs such as the 'total awareness program, technologies such as high speed surveillance computers and biometrics software, and cybercrime laws governments now possess an unprecedented ability to monitor the activities of citizens.

On the contrary many civil rights and other groups and NGO's have expressed concern that increasing surveillance of citizens may lead to a mass surveillance society, which in result limited the political freedom and violation of privacy rights. Fears such as this have led to numerous lawsuits such as *Hepting v. AT&T*[32]. The hactivist group 'Anonymouse' has hacked into government websites in protest of what it considers "draconian surveillance".

End-to-end encryption

End-to-end encryption (E2EE) is a digital communication paradigm of uninterrupted protection of data traveling between two communicating parties. It involves the originating party encrypting data so only the intended recipient can decrypt it, with no dependency on third parties. End-to-end encryption prevents intermediaries, such as IPs or ASPs, from discovering or tampering with communications. End-to-end encryption generally protects confidentiality and integrity both.

Examples of end-to-end encryption include HTTPS for web traffic, PGP for email, and OTR for instant messaging, and ZRTP for telephone, and TETRA for radio.

Typical server-based communications systems do not include end-to-end encryption. These systems can only guarantee protection of communications between clients and servers. Tey provided no guaranty for protection between the communicating parties themselves. Examples of non-E2EE systems are Google Talk, Yahoo Messenger, Facebook, and Dropbox. Some such systems, for example LavaBit and SecretInk, have even described themselves as offering "end-to-end" encryption when they do not. Some systems that normally offer end-to-end

[32] *"Is the U.S. Turning Into a Surveillance Society?"*. *American Civil Liberties Union*. Retrieved March 13, 2009. & *"Bigger Monster, Weaker Chains: The Growth of an American Surveillance Society" (PDF). American Civil Liberties Union. January 15, 2003*. Retrieved March 13, 2009. *(https://en.wikipedia.org/wiki/Computer_network)*

encryption have turned out to contain a back door that subverts negotiation of the encryption key between the communicating parties, for example Skype or Hushmail.

The end-to-end encryption paradigm does not directly address risks at the communications endpoints themselves, such as the technical exploitation of clients, poor quality random number generators, or key escrow. E2EE also does not address traffic analysis, which relates to things such as the identities of the end points and the times and quantities of messages that are sent.[33]

SSL/TLS

The introduction and rapid growth of e-commerce on the World Wide Web in the mid-1990s made it obvious that some form of authentication and encryption was needed. Netscape took the first shot at a new standard. At the time, the dominant web browser was Netscape Navigator. Netscape created a standard called secure socket layer (SSL). SSL requires a server with a certificate. When a client requests access to an SSL-secured server, the server sends a copy of the certificate to the client. The SSL client checks this certificate (all web browsers come with an exhaustive list of CA root certificates preloaded), and if the certificate checks out, the server is authenticated and the client negotiates a symmetric-key cipher for use in the session. The session is now in a very secure encrypted tunnel between the SSL server and the SSL client.[34]

1.4 SUMMARY

Today Software technology is the fastest growing technology. Software is in the core of the information technology. Today every bit of our life is dependent on the information technology. The computer works on the information which it take in the form of data. After analyzing the whole data it gives important information in the form of output. Computer can store enormous data. With the help of concerning software its analysis speed is amazing. In other words software take data as raw material and convert it into useful information as end product. Software applicability is not limited to some area. Its applicability is now spread every field i.e. earth, air, space and water. Computer (hardware) and software are the two sides of a coin. Together they are known as technology of software. The kernel is a computer program that is the core of a computer's operating system. A kernel connects the application software system to the hardware of a computer.

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link billions of devices worldwide. A web search engine (google yahoo etc.) is a software system that is designed to search for information on the World Wide Web. Internet communications services, included Voice over IP, file transfer, file sharing, and screen sharing. Voice over Internet Protocol (also voice over IP, VoIP or IP telephony) is a methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet. **A computer network** or data network is a digital telecommunications network that allows computers to exchange data in the form of packets across connections established using either cable or

[33] Wikipedia
[34] https://en.wikipedia.org/wiki/Computer_network

wireless media. Malware, botnet, Computer Viruses, Computer worms, Ransomware, Scareware, Spyware, Trojan horse, Key Logger, Keystroke logging etc. are computer programmes with malicious intentions aimed to harm to the targeted computer files, applications and working of computer. Antivirus software and Internet security programs can protect a programmable device from attack by detecting and eliminating viruses.

HTML is the standard markup language for creating web pages and web applications. CSS is a style sheet language used for describing the presentation of a document written in a markup language. Computer graphics are pictures and films created using computers. Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content.

Application software, System software, Operating systems, Server software, Plugins and extensions, Embedded software and Programming tools are example of different types of software used for different function to the computer. Malicious software or malware which is software that is developed to harm and disrupt computers.

Software is written in one or more programming languages. Software quality is very important, especially for commercial and system software like Microsoft Office, Microsoft Windows and Linux. If software is faulty (buggy), it can delete a person's work, crash the computer and do other unexpected things. Faults and errors are called "bugs" which are often discovered during alpha and beta testing. The software's license gives the user the right to use the software in the licensed environment, and in the case of free software licenses, also grants other rights such as the right to make copies.

A computer requires programs to function. A part of a computer program that performs a well-defined task is known as an algorithm. The concept of algorithm is at the very core of computer science. Algorithms are a series of step by step instructions for solving a problem. Algorithms can perform calculation, data processing and automated reasoning tasks. Coding may refer to Computer programming, the process of designing, writing, testing, debugging or troubleshooting, and maintaining the source code of computer programs (C++ is an example of a compile language for programing). Computer programming is a process that leads from an original formulation of a computing problem to executable computer programs. Programming involves activities such as analysis, developing understanding, generating algorithms, verification of requirements of algorithms including their correctness and resources consumption, and implementation (commonly referred to as coding) of algorithms in a target programming language.

Software Engineering is the application of engineering to the development of software in a systematic method. Software development is a long and wide process which includes a team work and includes many stages. Such as: analyzing the problem, market research, gathering requirements for the proposed business solution, devising a plan or design for the software-based solution, implementation (coding) of the software, testing the software, deployment, maintenance and bug fixing. A modeling language is any artificial language that can be used to express information or knowledge or systems in a structure that is defined by a consistent

set of rules. It can be graphical or textual. Designing of a software is a complex method involving technology and art both. The object of designing may vary. The object and techniques of programming are discussed in the unit above.

To prevent and monitor unauthorized access, misuse, modification, or denial of the computer network and its network-accessible resources, different security measures are adopted by network administrators. Network surveillance end-to-end encryption and secure socket layer are the few technologies which are used in network security.

1.5 GLOSSARY

1. **MALICIOUS:** bed intention; intending to do harm
2. **IPS OR ASPS:** An Internet service provider (ISP) is an organization that provides services for accessing, using, or participating in the Internet. An application service provider (ASP) is a business providing computer-based services to customers over a network; such as access to a particular software application (such as customer relationship management) using a standard protocol (such as HTTP).
3. **HTTPS:** HTTPS is an extension of the Hypertext Transfer Protocol (HTTP) for secure communication over a computer network, and is widely used on the internet.
4. **PGP:** Pretty-Good-Privacy is an encryption program that provides cryptographic privacy and authentication for data communication.
5. **OTR:** Off-the-Record Messaging (OTR) is a cryptographic protocol that provides encryption for instant messaging conversations.
6. **INSTANT MESSAGING:** Instant messaging (IM) technology is a type of online chat that offers real-time text transmission over the Internet. A LAN messenger operates in a similar way over a local area network. Short messages are typically transmitted between two parties, when each user chooses to complete a thought and select "send".
7. **ZRTP:** ZRTP ("Z" is a reference to its inventor, Zimmermann; "RTP" stands for Real-time Transport Protocol) is a cryptographic key-agreement protocol to negotiate the keys for encryption between two end points in a Voice over Internet Protocol (VoIP) phone telephony call based on the Real-time Transport Protocol.
8. **TETRA:** Terrestrial Trunked Radio (TETRA; formerly known as Trans-European Trunked Radio), a European standard for a trunked radio system, is a professional mobile radio and two-way transceiver specification. TETRA was specifically designed for use by government agencies, emergency services, (police forces, fire departments, ambulance) for public safety networks, rail transport staff for train radios, transport services and the military.
9. **DEBUGGING:** Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.
10. **LOGIC :** Logic, originally meaning "the word" or "what is spoken", but coming to mean "thought" or "reason", is a subject concerned with the most general laws of truth, and is now generally held to consist of the systematic study of

the form of valid inference. A valid inference is one where there is a specific relation of logical support between the assumptions of the inference and its conclusion. Historically, logic has been studied in philosophy (since ancient times) and mathematics (since the mid-19th century), and recently logic has been studied in computer science, linguistics, psychology, and other fields.

11. **PROLOG:** Prolog is a general-purpose logic programming language associated with artificial intelligence and computational linguistics.
12. **API:** In computer programming, an application programming interface (API) is a set of subroutine definitions, protocols, and tools for building application software.
13. **COMMUNICATION PROTOCOL:** Communication Protocol is a system of rules that allow two or more entities of a communications system to transmit information via any kind of variation of a physical quantity. Protocols may be implemented by hardware, software, or a combination of both. The Internet Protocol Suite, also called TCP/IP, is the foundation of all modern networking.

1.6 SAQS

1. SHORT ANSWER QUESTIONS

(i) What are the basic components of a computer?

(ii) Name the standard markup language for creating web pages and web applications.

(iii) Give the example of server software.

(iv) Is computer programme cover under the copyright law?

(v) A top-down approach sometimes known as the American approach. Why?

(vi) What are the four principles of Object Oriented Programming?

2. FILL IN THE BLANKS

(i) This first mechanical calculator, called the ----------.

(ii) ----------are the examples of social media.

(iii) ----------are programs that can replicate their structures or effects by infecting other files or structures on a computer.

(iv) ----------is an algorithm written in a way that resembles computer code.

(v) The ability to find in many forms is called ----------.

(vi) ----------is the mechanism of hiding of data implementation by restricting access to public methods.

(vii) A LAN can be connected to a WAN (wide area network) using a ----------.

(viii) An important piece of software for the computer is called ----------.

3. TRUE AND FALSE TYPE QUESTIONS

(i) Software Technology is the amalgamation of computer science, information technology and computer engineering. (true/false)

(ii) Computer worms is an insect. (true/false)

(iii) Software is written in only one programming languages. (true/false)

(iv) Algorithms cannot perform calculation, data processing and automated reasoning tasks. (true/false)

(v) Network congestion occurs when a link or node is carrying less data that its quality of service deteriorates. (true/false)

(vi) End-to-end encryption generally protects confidentiality and integrity of digital communication. (true/false)

(vii) The CPU, RAM, and other components all work together to run computer software. (true/false)

1.7 REFERENCE

1. https://en.wikiversity.org/wiki/Introduction_to_Turing_Machines
2. https://en.wikipedia.org/wiki/Kernel_(operating_system)
3. https://en.wikipedia.org/wiki/Email
4. https://en.wikiversity.org/wiki/Internet_Fundamentals/Networking
5. https://en.wikiversity.org/wiki/Internet_Fundamentals/Security
6. https://en.wikiversity.org/wiki/Internet_Fundamentals/Graphics_and_Multimedia
7. https://en.wikiversity.org/wiki/Internet_Fundamentals/Databases
8. https://en.wikipedia.org/wiki/Hyperlink
9. https://en.wikipedia.org/wiki/Software
10. https://en.wikipedia.org/wiki/Software
11. https://en.wikipedia.org/wiki/Software_development
12. http://www.sciencehq.com/computing-technology/programming-techniques.html
13. https://en.wikipedia.org/wiki/Computer_network
14. Fundamentals of cyber law and the emerging jurisprudence; Unit- 3; OWERVIEW ON COMPUTER AND WEB TECHNOLOGY
15. Cyber and E-Commerce laws, P. M. Bakshi and R. K. Suri
16. Gupta & Agarwal, Cyber Law; Ist edition, Premiere Publishing Company
17. Mishra J.P., An Introduction to Cyber laws, Central law Publications: First Edition: 2012.

1.8 SUGGESTED READINGS

1. Wikipedia
2. http://www.sciencehq.com/computing-technology/programming-techniques.html
3. Mishra J.P., An Introduction to Cyber laws, Central law Publications: First Edition: 2012.
4. Pavan Duggal, Textbook on cyber Laws, Universal Law Publishers, 2014 Edition.
5. Cyber and E-Commerce laws, P. M. Bakshi and R. K. Suri
6. Gupta & Agarwal, Cyber Law; Ist edition, Premiere Publishing Company

1.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

1. Write short notes on the following:
   (i) Kernals
   (ii) Internet
   (iii) Electronic mail
   (iv) Social media
   (v) CSS
   (vi) World Wide Web
   (vii) Hyperlink
2. Describe the different types of software.
3. Describe the modeling language in brief.
4. Wright short note on bug fixing or debugging.
5. What do you understand by software engineering? How it is applicable to the software development?
6. Computer programming is a process that leads from an original formulation of a computing problem to executable computer programs. Explain in own words.
7. What do you understand by algorithm and coding? Is algorithm is at very core of the computer science?
8. Wright the difference between top down and bottom up approach of programming technique.
9. Write an essay on computer networking.
10. Write the short notes on the following:
    (i) Wired technologies
    (ii) Wireless technologies
    (iii) LAN
    (iv) WAN
    (v) HAN
    (vi) VPN
    (vii) Network congestion
    (viii) End-to-end encryption
    (ix) Network surveillance
11. To prevent and monitor unauthorized access, misuse, modification, or denial of the computer network and its network-accessible resources, different security measures are taken by users?
12. What is friend-to-friend or F2F computer network?

1.10 ANSWER

SAQS

1. (i) hardware and software; See 1.3.1 (ii) Hypertext Markup Language (HTML); See 1.3.1.1 (iii) PHP, Java, ASP.NET; See 1.3.1.2 (iv) Yes; See 1.3.1.2

(v) because it was the approach adopted by the FBI (Federal Bureau of Investigation) in the 1970s; See 1.3.2.3.3 (vi) encapsulation, abstraction, inheritance and polymorphism; See 1.3.2.3.5

2. (i) Pascaline; See 1.3.1 (ii) Facebook, WhatsApp, Instagram, YouTube; See 1.3.1.1

(iii) Computer Viruses; See 1.3.1.1 (iv) Pseudocode; See 1.3.2 (v) polymorphism; See 1.3.2;3;5 (vi) Encapsulation; See1.3.2.3.5 (vii) router; See1.3.3

(viii) kernel; See1.3.1

3. (i) true; See 1.3(ii) false; See 1.3.1.3 (iii) false; See 1.3.1.2 (iv) false; See 1.3.2 (v) false; See 1.3.3 (vi) true; See 1.3.4 (vii) true; See 1.3.1

Terminal and Modern questions:

1. (i) See 1.3.1 (ii) See 1.3.1.1 (iii) See 1.3.1.1 (iv) See 1.3.1.1 (v) See 1.3.1.1 (vi) See 1.3.1.1 (vii) See 1.3.1.1
2. See 1.3.1.2
3. See 1.3.2.2
4. See 1.3.2.1
5. See 1.3.2.1
6. See 1.3.2
7. See 1.3.2
8. See 1.3.2.3
9. See 1.3.3
10. (i)-(vi) See 1.3.3 (vii)-(ix) See 1.3.4
11. See 1.3.4
12. See 1.3.3

UNIT 2

COPYRIGHT IN INTERNET

STRUCTURE

2.1 INTRODUCTION

2.2 OBJECTIVES

2.3 SUBJECT

2.3.1 COPYRIGHT LAW IN INDIA – A BRIEF OVERVIEW

2.3.1.1 COPYRIGHT (AMENDMENT ACT), 1983

2.3.1.2 COPYRIGHT (AMENDMENT ACT), 1984

2.3.1.3 COPYRIGHT (AMENDMENT ACT), 1992

2.3.1.4 COPYRIGHT (AMENDMENT ACT), 1994

2.3.1.5 COPYRIGHT (AMENDMENT ACT), 1999

2.3.1.6 COPYRIGHT (AMENDMENT ACT) 2012

2.3.2 SUBJECT MATTER OF PROTECTION OF COPYRIGHT

2.3.3 WIPO INTERNET TREATIES

2.3.3.1 RIGHTS PROTECTED UNDER WIPO COPYRIGHT TREATY

2.3.3.2 TECHNOLOGICAL PROTECTION MEASURES AND RIGHTS MANAGEMENT INFORMATION (TPMS/RMI)

2.3.3.3 TREATY PROPOSAL ON COPYRIGHT LIMITATIONS AND EXCEPTIONS FOR LIBRARIES AND ARCHIVES

2.3.4 HOW COPYRIGHT LAW PROTECT ANY WORK ON THE INTERNET

2.3.4.1 RAGISTRATION OF COPYRIGHT

2.3.4.2 PROTECTION OF MULTIMIDEA

2.3.4.4 RIGHT TO DISTRIBUTION AND COMMUNICATION

2.3.4.5 FAIR USE IN DIGITAL WORKS

2.3.4.6 PROTECTION AGAINST INTERNET PIRACY

2.4 SUMMARY

2.5 GLOSSARY

2.6 SAQS

2.7 REFERENCES

2.8 SUGGESTED READINGS

2.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

2.10 ANSWER SAQS

2.1 INTRODUCTION

Copyright, patent and trademarks are considered as 'Intellectual property'. Every work that is original and outcome of the human intellect is come under intellectual property and the owner or inventor has some exclusive right on it. Patent covers devices, formulas, tools and anything that has utility and the law governs, gives inventors the exclusive right to duplicate their invention's design. A trade4mark is a word, phrase or logo that identifies a product, a service or the person or the company that offers the product or service to their customers. Copyright apply to art, music plays, movies, literature and scholarly work it prevent others from copying the work.

Internet technology is growing faster than any other technology. Any law including copyright, that apply on the internet have been established either by parliament or the court through their preceding. It is a common thought about the internet that anything posted online can be copied or downloaded. But reality is different. Online material also has copyright. In the present unit we discuss the copyright issues on internet.

2.2 OBJECTIVES

After reading this unit you will be able to understand the following-

- What is copyright
- Subject matter and meaning of copyright
- What constitutes "Internet Treaties"
- How Indian copyright Act protect the copyright matter on the internet
- What are TMPs and RMP
- Fair use of copyrighted material on internet, allow by law

2.3 SUBJECT

2.3.1 COPYRIGHT LAW IN INDIA – A BRIEF OVERVIEW

Before discussing applicability of copyright on internet, let discuss about copyright- its meaning, history, legislation in India etc.

Since ancient time, there is nothing any concept like – so called 'intellectual property right', in India. Knowledge is always in public domain and available for all without any restriction. Like most developing countries, India also received modern Copyright Law as a gift from its colonial rules.

Before independence the copyright law in India governed by Copyright Act of 1847, the first Copyright Act for India and then the Act of 1914 which was the replica of the British Copyright Act of 1911, with few modifications. This law continued to be the law of the land until 1957.[35]

The objects and the reasons for the passing Copyright Act of 1957 were stated in the parliament as follows:

[35] Article 372; Continuance in force of existing laws and their adaption

"the existing law relating to Copyright is contained in the Copyright Act 1911 of the UK as modified by the Indian Copyright Act 1914 apart from the fact that the UK Act does not fit in with the changed constitutional status of India, it is necessary to enact an independent, self-contained law on the subject of copyright in the light of growing public consciousness and the rights and obligations of authors and in the light of experience gained in the working of the existing law during the last 50 years. New and advanced means of communication like broadcasting, lithography etc., also call for certain amendments in the existing law. Adequate provision has also to be made for fulfillment of international obligations in the field of copyright which India might accept. A complete revision of the Law of Copyright, therefore, seems inevitable."[36]

The matter related to copyright fall under Entry 49 of List -1[37], under the Constitution of India, which is the Union list and it is a subject of Central law. Thus, the parliament has the exclusive right to frame laws on this subject.

India is a member of most of the important international conventions governing the area of copyright law, including the Berne Convention of 1886 (as modified at Paris in 1971), the Universal Copyright Convention of 1951, the Rome Convention of 1961and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). But India is not a member of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT).[38]

2.3.1.1 COPYRIGHT (AMENDMENT ACT), 1983

Due to advancement of technology, there was a problem of global piracy. Hence Berne and United Copyright Conventions were revised in 1971 at Paris and special concessions were given to the developing countries for the larger interests of the public to have access to foreign works. Thus Copyright Amendment Act, 1983 came in operation in conformity with the international developments.

2.3.1.2 COPYRIGHT (AMENDMENT ACT), 1984

Technology growing much faster and further amendment was made in copyright law. This amendment was related to inclusion of video film, introduction of duplication equipment, protection of computer program, enhancement of punishment and declaration of the infringement of copyright and related rights as an economic offence etc.

2.3.1.3 COPYRIGHT (AMENDMENT ACT), 1992

This time the term of the copyright protection was extended for a period of 10 years and now the total period of copyright become life plus 60 years in general.

2.3.1.4 COPYRIGHT (AMENDMENT ACT), 1994

[36] As referred in P. Narayanan, Law of Copyright & Industrial Designs, Eastern Law House, 2"d ed., 1995, p. 7.; http://shodhganga.inflibnet.ac.in/bitstream/10603/61938/11/11_chapter%204.pdf
[37] Schedule 7, List I Entry 49, Patent, Inventions and Design; Copyright, Trade-marks and Merchandise marks.
[38] https://en.wikipedia.org/wiki/Copyright_law_of_India

This amendment was bring to the Indian Copyright law in conformity with TRIPs agreement and brought major changes to the Copyright Act 1957. It amended many provisions of the copyright law including the changes in offences relating to use of infringing copy of a computer program.

2.3.1.5 COPYRIGHT (AMENDMENT ACT), 1999

These amendment were made to keep the Indian copyright law on the same footage as the international copyright law and to protect the intellectual property from flouting by the use of modem mechanism developed due to the technological advancement of the time. This amendment was mainly related to some sections like section 38, 40A, 42A and 52 etc. Under these sections parliament brought certain changes to cope with the changes brought throughout the world by the TRIPs agreement. The performer rights that were protected for 25 years previously, extended to 50 years in this amendment. Second important amendment was the power of the Central Government to apply Chapter-VIII of the Act to broadcasting organizations and performers in certain other countries, has been inserted by this amendment.

2.3.1.6 COPYRIGHT (AMENDMENT ACT) 2012

This amendment to the Copyright Act, 1957 has been considered as the major step which brought the Act into conformity with the WIPO Copyright Treaty(WCT) and the WIPO Performances and Phonograms Treaty (WPPT) which together famously known as "WIPO Internet treaty". This policy initiative was imperative to extend the protection of copyright to the online and digital environment.[39]

2.3.2 SUBJECT MATTER OF PROTECTION OF COPYRIGHT

The provisions of Section 13 of the Indian Copyright Act, 1957 clearly tell about the works in which copyright shall subsists or shall not subsists. Section 13 reads as follows-

(1) Subject to the provisions of this section and the other provisions of this Act, copyright shall subsist throughout India in the following classes of works, that is to say,—

(a) original literary, dramatic, musical and artistic works;

(b) cinematograph films; and

(c) sound recording.

(2) Copyright shall not subsist in any work specified in sub-section (1), other than a work to which the provisions of section 40 or section 41 apply, unless,—

(i) in the case of a published work, the work is first published in India, or where the work is first published outside India, the author is at the date of such publication, or in a case where the author was dead at that date, was at the time of his death, a citizen of India;

[39] http://www.livelaw.in/reflections-five-years-copyright-amendment-act-2012/

(ii) in the case of an unpublished work other than a work of architecture, the author is at the date of the making of the work a citizen of India or domiciled in India; and

(iii) in the case of work of architecture, the work is located in India.

Explanation. — In the case of a work of joint authorship, the conditions conferring copyright specified in this sub-section shall be satisfied by all the authors of the work.

(3) Copyright shall not subsist— (a) in any cinematograph film if a substantial part of the film is an infringement of the copyright in any other work;

(b) in any sound recording made in respect of a literary, dramatic or musical work, if in making the sound recording, copyright in such work has been infringed.

(4) The copyright in a cinematograph film or a sound recording shall not affect the separate copyright in any work in respect of which or a substantial part of which, the film, or, as the case may be, the sound recording is made.

(5) In the case of work of architecture, copyright shall subsist only in the artistic character and design and shall not extend to processes or methods of construction.

It is worth to mention here that, the section 40 of the Indian Copyright Act, 1957 empower the central government to extend copyright to foreign works. Section 41 of this act provides Provisions as to works of certain international organisations.

Meaning of Copyright[40]— For the purposes of this Act, "copyright" means the exclusive right subject to the provisions of this Act, to do or authorise the doing of any of the following acts in respect of a work or any substantial part thereof, namely:—

(a) in the case of a literary, dramatic or musical work, not being a computer programme,—

(i) to reproduce the work in any material form including the storing of it in any medium by electronic means;

(ii) to issue copies of the work to the public not being copies already in circulation;

(iii) to perform the work in public, or communicate it to the public;

(iv) to make any cinematograph film or sound recording in respect of the work;

(v) to make any translation of the work; (vi) to make any adaptation of the work;

(vii) to do, in relation to a translation or an adaptation of the work, any of the acts specified in relation to the work in sub-clauses (i) to (vi);

(b) in the case of a computer programme,—

(i) to do any of the acts specified in clause (a);

[40] Section 14 of Indian Copyright Act, 1957

(ii) to sell or give on commercial rental or offer for sale or for commercial rental any copy of the computer programme:

Provided that such commercial rental does not apply in respect of computer programmes where the programme itself is not the essential object of the rental.

(c) in the case of an artistic work,—

(i) to reproduce the work in any material form including—

(A) the storing of it in any medium by electronic or other means; or

(B) depiction in three-dimensions of a two-dimensional work; or

(C) depiction in two-dimensions of a three-dimensional work;

(ii) to communicate the work to the public;

(iii) to issue copies of the work to the public not being copies already in circulation;

(iv) to include the work in any cinematograph film;

(v) to make any adaptation of the work;

(vi) to do in relation to adaptation of the work any of the acts specified in relation to the work in sub-clauses (i) to (iv);

(d) in the case of a cinematograph film,—

(i) to make a copy of the film, including—

(A) a photograph of any image forming part thereof; or

(B) storing of it in any medium by electronic or other means;

(ii) to sell or give on commercial rental or offer for sale or for such rental, any copy of the

(iii) to communicate the film to the public;

(e) in the case of a sound recording,—

(i) to make any other sound recording embodying it 1 [including storing of it in any medium by electronic or other means;

(ii) to sell or give on commercial rental or offer for sale or for such rental, any copy of the sound recording;

(iii) to communicate the sound recording to the public.

2.3.3 WIPO INTERNET TREATIES

The field of copyright and related rights has expanded enormously with the technological progress of the last several decades. Dissemination of works via the Internet is the latest development which raises new questions concerning copyright.

WIPO is deeply involved in the ongoing international debate to shape new standards for copyright protection in cyberspace. The organization administers the WIPO Copyright Treaty and the WIPO Performances and Phonogram Treaty, together, which are known as the "Internet Treaties". Both set down international norms aimed at preventing unauthorized access to and use of creative works on the Internet or other digital networks.

The WCT deals with protection for authors of literary and artistic works, such as writings and computer programs; original databases; musical works; audiovisual works; works of fine art and photographs; whereas the WPPT deals with protection for authors rights of performers and producers of phonograms.

Both treaties require countries to provide a framework of basic rights, allowing creators to control and/or be compensated for the various ways in which their creations are used and enjoyed by others. Most importantly, the treaties ensure that the owners of those rights will continue to be adequately and effectively protected when their works are disseminated through Internet. The treaties thus clarify that existing rights continue to apply in the digital environment. They also create new online rights. To maintain a fair balance of interests between the owners of rights and the general public,[41] the treaties further clarify that countries have reasonable flexibility in establishing exceptions or limitations to rights in the digital environment. Countries may, in appropriate circumstances, grant exceptions for uses deemed to be in the public interest, such as for non-profit educational and research purposes.

The treaties also require countries to provide not only the rights themselves, but also two types of technological adjuncts to the rights. These are intended to ensure that right holders can effectively use technology to protect their rights and to license their works online. The first, known as the "**anti-circumvention" provision**, tackles the problem of "hacking": it requires countries to provide adequate legal protection and effective remedies against the circumvention of technological measures (such as encryption) used by right holders to protect their rights. The second type of technological adjuncts safeguards the reliability and integrity of the online marketplace by requiring countries to prohibit the deliberate alteration or deletion of electronic **"rights management information"**: that is, information which accompanies any protected material, and which identifies the work, its creators, performer, or owner, and the terms and conditions for its use.[42]

2.3.3.1 RIGHTS PROTECTED UNDER WIPO COPYRIGHT TREATY

The WIPO Copyright Treaty (WCT) is a special agreement under the Berne Convention. It deals with the protection of works and the rights of authors in the digital environment. The WCT mentions following two subject matters to be protected by copyright:[43]

(i) computer programs, whatever the mode or form of their expression; and

[41] Preamble, WIPO Copyright treaty, 1996
[42] http://www.wipo.int/copyright/en/activities/internet_treaties.html
[43] http://www.wipo.int/treaties/en/ip/wct/summary_wct.html

(ii) compilations of data or other material ("databases"), in any form, which, by reason of the selection or arrangement of their contents, constitute intellectual creations. (Where a database does not constitute such a creation, it is outside the scope of this Treaty.)

As to the rights granted to authors**,** apart from the rights recognized by the Berne Convention, the Treaty also grants the following rights:

- **The right of distribution** is the right to authorize the making available to the public of the original and copies of a work through sale or other transfer of ownership.
- **The right of rental** is the right to authorize commercial rental to the public of the original and copies of three kinds of works:
    (i) computer programs (except where the computer program itself is not the essential object of the rental);
    (ii) cinematographic works (but only in cases where commercial rental has led to widespread copying of such works, materially impairing the exclusive right of reproduction); and
    (iii) works embodied in phonograms as determined in the national law of Contracting Parties (except for countries which, since April 15, 1994, have had a system in force for equitable remuneration of such rental).
- **The right of communication to the public** is the right to authorize **any** communication to the public, by wire or wireless means, including "the making available to the public of works in a way that the members of the public may access the work from a place and at a time individually chosen by them". The quoted expression covers, in particular, on-demand, interactive communication through the Internet.

As to **limitations and exceptions**, Article 10 of the WCT incorporates the so-called "three step" test to determine limitations and exceptions, as provided for in Article 9(2) of the Berne Convention, extending its application to all rights. The Agreed Statement accompanying the WCT provides that such limitations and exceptions, as established in national law in compliance with the Berne Convention, may be extended to the digital environment. Contracting States may devise new exceptions and limitations appropriate to the digital environment. The extension of existing or the creation of new limitations and exceptions is allowed if the conditions of the "three-step" test are met.

As to **duration**, the term of protection must be at least 50 years for any kind of work.

The enjoyment and exercise of the rights provided for in the Treaty cannot be subject to any formality.

The Treaty obliges Contracting Parties to provide legal remedies against the circumvention of technological measures (e.g., encryption) used by authors in connection with the exercise of their rights, and against the removal or altering of information, such as certain data that identify works or their authors, necessary for the management (e.g., licensing, collecting and distribution of royalties) of their rights ("rights management information").

The Treaty obliges each Contracting Party to adopt, in accordance with its legal system, the measures necessary to ensure the application of the Treaty. In particular, each Contracting Party must ensure that enforcement procedures are available under its law so as to permit effective

action against any act of infringement of rights covered by the Treaty. Such action must include expeditious remedies to prevent infringement as well as remedies that constitute a deterrent to further infringement.

The Treaty establishes an Assembly of the Contracting Parties whose main task is to address matters concerning the maintenance and development of the Treaty. It entrusts to the Secretariat of WIPO the administrative tasks concerning the Treaty.

The Treaty was concluded in 1996 and entered into force in 2002.

The Treaty is open to States members of WIPO and to the European Community. The Assembly constituted by the Treaty may decide to admit other intergovernmental organizations to become party to the Treaty. Instruments of ratification or accession must be deposited with the Director General of WIPO.

2.3.3.2 Technological Protection Measures and Rights Management Information (TPMs/RMI)

As stated above, in order to ensure that unauthorized copying of a protected material can be prevented or detected, the WIPO Copyright Treaty (WCT) included new provisions dealing with TPMs and RMI.

TPMs are technological safeguards which are put in place which prevents the copying of a protected work in digital format to be copied multiple times. This includes limiting the number of devices on which a song can be copied, using software which does not allow the consumer to copy the protected works from an optical disc.

Article 11 of WIPO Copyright Treaty "Obligations concerning Technological Measures" requires contracting parties to

"...provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law."[44]

RMI are generally put on the protected work to ensure that the label of the owner of the work is always embedded in the work. For example, in case of a movie, the film studio may use an RMI which would be positioned as the logo in the movie. It can be also stored as metadata along the video or the protected work.

Article 12 of WIPO Copyright Treaty "Obligations concerning Rights Management Information" requires contracting parties to

(1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies

[44] WIPO Copyright Treaty- http://trade.ec.europa.eu/doclib/docs/2003/october/tradoc_111709.pdf

having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:

(i) to remove or alter any electronic rights management information without permission;

(ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority."

(2) As used in this Article, "rights management information" means information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.[45]

Article 18 and 19 of the WIPO Performances and Phonograms Treaty, 1996, (WPPT) states that the states must provide legal protection for TPMs and RMI apart from making provisions for legal remedy in case of circumvention of the technological protection measures.

Article 18: Obligations concerning Technological Measures-

"Contracting parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by per formers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law."

Article 19: Obligations concerning Rights Management Information-

(1) Contracting parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty:

(i) to remove or alter any electronic rights management information without authority;

(ii) to distribute, import for distribution, broadcast, communicate or make available to the public, without authority, performances, copies of fixed performances or phonograms knowing that electronic rights management information has been recovered on altered without authority.

(2) As used in this Article, "rights management information" means information which identifies the performer, the performance of the performer, the producer of the phonogram, the phonogram, the owner of any right in the performance or phonogram, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a fixed performance or a phonogram or appears in connection with the communication or making available of a fixed performance or a phonogram to the public.[46]

[45] Ibid

[46] WIPO Performance and Phonogram Treaty- http://www.niscair.res.in/jinfo/JIPR/JIPR%202(3)%20(WIPO-Performance%20and%20Phonograms%20Treaty).pdf

In the United States, the Digital Millennium Copyright Act ("DMCA") has implemented the treaty provisions regarding the circumvention of some technological barriers to copying intellectual property. European Union**.**

In European Union anti-circumventing rules were implemented in European Directive 2001/29/EC of the European Parliament and of the council of May 22, 2001 on the harmonization of certain aspects of copyright and related rights in the information society.

Australia prohibits circumvention of "access control technical protection measures" in Section 116 of the Copyright Act. The law currently imposes penalties for circumvention of such measures as well as the manufacturing and distribution of tools to enable it.

It is interesting to note that India is not a signatory to both the treaties of WPPT and WCT. This could be because of the strict copyright provisions in the treaties which undermine many goals of accessibility currently being pursued by India.[47] However to harmonize the Indian Copyright Act, 1957 with the WCT and WPPT, the Copyright (Amendment) Act, 2012 was introduced.

2.3.3.3 TREATY PROPOSAL ON COPYRIGHT LIMITATIONS AND EXCEPTIONS FOR LIBRARIES AND ARCHIVES

The International Federation of Library Association (IFLA) is currently working closely with the member states of WIPO in order to draft a binding international instrument for copyright limitations and exceptions. These exceptions and limitations are necessary for the libraries to preserve their collection, lend materials and facilitate/ support education and research. This treaty proposal is mainly being drafted by NGO's and civil society actors in partnership with librarians and intellectual property experts. IFLA has collaborated with the International Council on Archives (ICA), Electronic Information for Libraries (EIFL) and *Corporación Innovarte* to produce the Treaty Proposal on Copyright Limitations and Exceptions for Libraries and Archives

Some of the things that the treaty proposes are:

- Parallel importation (i.e. buying books from abroad)
- Cross-border uses of works and materials reproduced under a limitation and exception
- Library lending
- Library document supply
- Preservation of library and archival materials
- Use of works and other material under related rights for the benefit of persons with disabilities
- Use of works for education, research and private study
- Use of works for personal and private purposes
- Access to retracted and withdrawn works
- Orphan works

[47]The World Intellectual Property organization- the Center for Internet & Society; https://cis-india.org/telecom/knowledge-repository-on-internet-access/wipo

It also proposes:

- Obligation to respect exceptions to copyright and related rights
- Obligations concerning Technological Protection Measures
- Limitation on liability for libraries and archives

The Treaty proposal suggests a basic foundation for all countries, setting out a framework for national copyright laws that is flexible and consistent with existing international law. It does not seek to impose harmonization or a 'one size fits all' approach.

It has been designed to accommodate common needs as well as differentiation according to levels of development and particularities of WIPO Member States. Although the proposal makes it mandatory to address certain key issues, in most cases there is flexibility for implementation, using the international standard of "fair practice" as set out in the Berne Convention.

2.3.4 HOW COPYRIGHT LAW PROTECT ANY WORK ON THE INTERNET

2.3.4.1 RAGISTRATION OF COPYRIGHT

Section 44 to 50 of the Indian copyright Act, 1957 included the provisions of registration of copyright. Though registration of copyright is not compulsory but it provided prima facie evidence to the work.[48] However copyright subsists as soon as the work is created and given a material form. In case of any dispute of work registration of copyright provided an evidence in court of law. According to the section 48 of said Act, "The Register of Copyrights shall be prima facie evidence of the particulars entered therein and documents purporting to be copies of any entries therein, or extracts therefrom, certified by the Registrar of Copyrights and sealed with the seal of the Copyright Office shall be admissible in evidence in all courts without further proof or production of the original."

Section 44 provided the provision to maintain a register in the office under the Indian copyright Act, 1957. According to the section 44 of the act, — "There shall be kept at the Copyright Office a register in the prescribed form to be called the Register of Copyrights in which may be entered the names or titles of works and the names and addresses of authors, publishers and owners of copyright and such other particulars as may be prescribed."

On the internet the copyright content are available on the particular websites. Which are owned by the author or legal owner of the work. Web sites are general1y a combination of text, images, graphics, sound and video. So, each category of work could be registered under the corresponding part i.e. text under literary work. Images under pictures. Sound under sound recording and so on. Websites are software hence it may be copyrighted under the category of computer program. A computer program means, " a set of instructions expressed in words,

[48] Section 48 of Indian copyright Act, 1957

codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result".[49]

2.3.4.2 PROTECTION OF MULTIMIDEA

Digital technologies have made possible the creation of works-with much more versatility than in the past. The work may be in the form of multimedia, the content that uses a combination of different forms such as text, audio, images, animations, video and interactive content. Multimedia contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material.

Multimedia can be recorded and played, displayed, interacted with or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content.[50]

With the help of digital technology more and more works from different categories are being fixed in a single medium of expression. Works protected by copyright have become less and less differentiated by type and more and more equivalent to one another because they are in the same medium. The complexity of different work available on a single platform has given rise to the consideration of forming a separate category under the present Copyright laws for future. The user can interact with the work in his own ways which is impossible previously i.e. making alterations and additions and even create a new work out of the existing ones. This would not have been a major issue, if the rights for all classes of works were the same. But in the present copyright law of India different classes of works distinguishes between in the matter of rights. For example, the rights in a literary work and those in a cinematographic film or sound are different. There is no rental right in a literary work, whereas there is such a right in cinematographic films. Moreover as the criterion of authorship is different between literary, dramatic, musical and artistic works on the one hand and cinematographic films and sound recordings on the other hand, the question arises that what kind of protection a multimedia work attracts in its individual combination of component parts. The significance of the issue lies in the fact that the relevant categorization entails different legal consequences and the presence of multimedia work defies existing classification under the copyright law. It is not a new type of work to the extent that a multimedia product can fall under one or several, already existing, categories. Protection of the individual elements of a multimedia work must not be confused with protection of the multimedia production as a whole. In accordance with the existing provisions of the Copyright Act it remains possible to dispose of the individual contributions separately, even after the individual elements have been combined in one single work. The actual classification of a particular multimedia product will depend on the type of work and on the different and specific characteristics of each individual multimedia product. Therefore, it has to be decided on a case-by-case basis. Thus the final interpretation, will in the hands of the courts.

[49] Section 2(ffc) of Indian copyright Act, 1957
[50] https://en.wikipedia.org/wiki/Multimedia

It is possible to consider and treat multimedia products as works similar to cinematographic film in the sense of section 2(f)[51] of the Copyright Act, 1957. It seems possible to classify and to treat multimedia productions as collections of literary or artistic works in the sense of Article 2(5) of the Berne Convention and they might also fall under the category of compilations of data or other material in the sense of Article 10(2) of the TRIPS Agreement. There is also a view that multimedia work be classified as computer program since every multimedia work will have a software component. As there are separate provisions for rights and authorship of a computer program distinct from literary works in the Copyright Act, this could be a possible solution. However, issues may arise on the retention of separate copyrights in the works incorporated in the multimedia in terms of section 13[52] of the Act and the rights of performers[53] in the product.

At present, large numbers of multi-media works are being created by combining pre-existing works. The classification of multi-media works is an issue, it still remains to be decided whether multimedia works should be regarded as a separate category of works protected under the regime of copyright.[54]

2.3.4.3 RIGHT OF REPRODUCTION IN DIGITAL MEDIUM

Right of reproduction is most basics of copyright. According to WCT Agreed Statement about the question that, 'whether digital copying is reproduction, it is said, "The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."[55]

The actual problem arises when transitory or incidental reproduction that takes place in internet communication creates an issue regarding right to reproduction in digital medium. For example when a buyer goes to a book stall, he can browsing a book and decide to buy the book or not. In case of internet this browsing can takes place only after the digital reproduction of book in his (buyer's) computer's RAM. Whether this reproduction come under the scope of right to reproduction. This question is not yet resolved.[56]

The Indian Copyright Law covered the right of reproduction in digital medium. It says, 'in the case of a literary, dramatic or musical work, the right, to reproduce the work in any material form including the storing of it in any medium by electronic means.[57] Further in case of

[51] "cinematograph film" means any work of visual recording and includes a sound recording accompanying such visual recording and "cinematograph" shall be construed as including any work produced by any process analogous to cinematography including video films.'
[52] Section 13(4)- "The copyright in a cinematograph film or a sound recording shall not affect the separate copyright in any work in respect of which or a substantial part of which, the film, or, as the case may be, the sound recording is made."
[53] Section 38 of the Indian copyright Act, 1957
[54]http://14.139.60.114:8080/jspui/bitstream/123456789/935/1/007_Copyright%20Law%20and%20the%20Internet.pdf
[55] Agreed Statement of WCT Concerning Article 1(4);
http://www.wipo.int/wipolex/en/treaties/text.jsp?file_id=381455
[56] T.C.James, Supra notes; P.430
[57] Section 14 (a), Indian copyright Act, 1957

computer program, sound recording, cinematographic films and also artistic work the expression 'reproduction' includes also 'the storing of it in any medium by electronic means,[58]

2.3.4.4 RIGHT TO DISTRIBUTION AND COMMUNICATION

Any work, which stored in a computer memory as on a website accessible to the public at their convenience, it constitute the communication of that work to the public.

In the WIPO committees an agreement emerged that the transmission of works on the internet or similar network should be the object of an exclusive right of authorization of the author or the copyright owner. The Berne Convention does not offer the full coverage for the right of communication to the public and distribution. The WCT works on this issue and extends applicability of the right of communication to the public to all categories of works and clarifies that, that right also covers transmission in interactive system described in a legal-characterization-free manner.[59] This is included in the Article 8 of the treaty, which says, "Without prejudice to the provisions of Articles ……..of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them."

The Indian Copyright Act also provides the definition of 'communication to the public' in section 2 (ff), which reads as follows-

"communication to the public" means making any work or performance available for being seen or heard or otherwise enjoyed by the public directly or by any means of display or diffusion other than by issuing physical copies of it, whether simultaneously or at places and times chosen individually, regardless of whether any member of the public actually sees, hears or otherwise enjoys the work or performance so made available.

Explanation.— For the purposes of this clause, communication through satellite or cable or any other means of simultaneous communication to more than one household or place of residence including residential rooms of any hotel or hostel shall be deemed to be communication to the public"[60]

Thus the right of communication to the public in the Indian Copyright law is seen fully compatible to the definition given by WCT.

2.3.4.5 FAIR USE IN DIGITAL WORKS

The preamble of WCT said, "The Contracting Parties…….. Recognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention"

[58] Section 14, Indian copyright Act, 1957; different clauses Subs. by Act 49 of 1999, and Subs. by Act 27 of 2012

[59] See, the "Umbrella Solution";
http://www.wipo.int/export/sites/www/copyright/en/activities/pdf/wct_wppt.pdf

[60] Subs. by Act 27 of 2012, s. 2(iii), , for clause (ff) (w.e.f. 21-6-2012).

Hence to keep the interest of larger society the exclusive rights granted to the authors and creator of artistic, scientific and other works are limited by time. Also the use of copyrighted work is granted for the academic, research and legislative or judicial purposes.

Indian copyright law allow fair use of copyrighted work. A "non-profit library or non-profit educational institution" allow to use computer programme, sound recording, visual recording or cinematograph film without paying any rent.[61]

Section 52 (a) says, that, The storing of any work in any electronic medium for the purposes of [(i) private or personal use, including research; (ii) criticism or review, whether of that work or of any other work; (iii) the reporting of current events and current affairs, including the reporting of a lecture delivered in public,] including the incidental storage of any computer programme which is not itself an infringing copy for the said purposes, shall not constitute infringement of copyright.

Further this section said that in the case of digital work (computer programme), following acts shall not constitute an infringement of copyright-

- ✓ to make back-up copies purely as a temporary protection against loss, destruction or damage in order only to utilize the computer programme for the purpose for which it was supplied;
- ✓ the making of copies or adaptation of the computer programme from a personally legally obtained copy for non-commercial personal use;
- ✓ the transient or incidental storage of a work or performance purely in the technical process of electronic transmission or communication to the public;
- ✓ the storing of a work in any medium by electronic means by a non-commercial public library, for preservation if the library already possesses a non-digital copy of the work;[62]

2.3.5.6 PROTECTION AGAINST INTERNET PIRACY

In the earlier part of this unit we discussed about Technological Protection Measures and Rights Management Information, the new technological safeguards introduced by the WIPO Copyright Treaty. Two new sections- 65A and 65B has been introduced to the Indian Copyright Act through the Copyright (Amendment) Act, 2012, which provided protection for technological measures and protection for right management information.

65A. Protection of technological measures. — (1) Any person who circumvents an effective technological measure applied for the purpose of protecting any of the rights conferred by this Act, with the intention of infringing such rights, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine.

(2) Nothing in sub-section (1) shall prevent any person from,—

(a) doing anything referred to therein for a purpose not expressly prohibited by this Act:

[61] Section 2 (fa); Indian copyright Act, 1957

[62] To facilitates digitisation of libraries, this new clause (n) was introduced by Copyright (Amendment) Bill 2012

Provided that any person facilitating circumvention by another person of a technological measure for such a purpose shall maintain a complete record of such other person including his name, address and all relevant particulars necessary to identify him and the purpose for which he has been facilitated; or

(b) doing anything necessary to conduct encryption research using a lawfully obtained encrypted copy; or

(c) conducting any lawful investigation; or

(d) doing anything necessary for the purpose of testing the security of a computer system or a computer network with the authorisation of its owner; or

(e) operator; or

(f) doing anything necessary to circumvent technological measures intended for identification or surveillance of a user; or

(g) taking measures necessary in the interest of national security.

Above provisions originates from article 11 of WCT and article 18 of WPPT.[63] Whereas Subsection (1) of 65A makes circumvention of technological measures i.e. digital piracy, a punishable offence with imprisonment, the subsection (2) of this section allow fair use of same. In this way sub section (2) provides some exceptions.

65B. Protection of Rights Management Information. — Any person, who knowingly, —

(i) removes or alters any rights management information without authority, or

(ii) distributes, imports for distribution, broadcasts or communicates to the public, without authority, copies of any work, or performance knowing that electronic rights management information has been removed or altered without authority, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine:

Provided that if the rights management information has been tampered with in any work, the owner of copyright in such work may also avail of civil remedies provided under Chapter XII against the persons indulging in such acts.

Above provisions of section 65B also emanates from the Article 12 of WCT and Article 19 of the WPPT.

The new technology makes administration of copyright protection quite difficult. The circulation of any work throughout the world within a second can be possible today with the help of internet. The development in circumvention (illegal hacking) technology makes any protection measures useless. Hence above legal protection on the internet seems insufficient. The problem created by technologies needs to be tackled by technologies plus more efficient laws. Today technology grow faster than law. Hence copyright work need more attention and a universal solution

[63] Described earlier in this unit

The Department of Industrial Policy and Promotion (DIPP) on 5 September 2016, issued an Office Memorandum clarifying that internet broadcasting companies come under the purview of a broadcasting organization under section 31 D of Copyrights Act, 1957. Accordingly, such internet broadcasting companies should obtain a statutory license.

The Copyright Amendment Act 2012, inserted section 31D that any "broadcasting organization communicating to the public" of any literary, musical work or sound recording, to follow the compliances under the Copyright Act, which including but not limited to, giving prior notice of the broadcast, duration, territorial coverage and pay the royalties to the owner of rights in each work, announcing the names of authors and performers. It has prescriptive process of prior intimation for any modification or alteration to the literary or musical work. Further, the broadcaster has to maintain records, books of account and render copies to the owners of the copyright.

2.5 SUMMARY

Copyright is a part of 'intellectual property rights'. Ancient Indian culture did not support any personal right over intellectual property. Then knowledge was always for good and help for common people. It was not a commodity for making profit.

Like most of the countries, India received modern Copyright Law as a gift from its colonial rules. Until 1957 the copyright law in India governed by Copyright Act of 1847. When the parliament passed the Indian Copyright Act, 1957. The matter related to copyright fall under Entry 49 of List I. Hence the Central Government has the exclusive right to frame laws on this subject. With the advancement of technology, many amendments had made in the Act. The amendment act of 2012 to the Copyright Act, 1957 has been considered as the major step which brought the Act into conformity with the WIPO Copyright Treaty(WCT) and the WIPO Performances and Phonograms Treaty (WPPT) which together famously known as "WIPO Internet treaty". It extend the protection of copyright to the online and digital environment.

The primary condition for availing for protection of copyright the intellectual work must be original and in a tangible medium of expression. Section 13 of Indian Copyright Act tell about the subject matter of protection of copyright. The meaning of copyright given in the section 14 of the Indian Copyright Act, 1957.

World Intellectual Property Organization is deeply involved in the ongoing international debate to shape new standards for copyright protection in cyberspace. The WIPO Copyright Treaty deals with protection for authors of literary and artistic works, such as writings and computer programs; original databases; musical works; audiovisual works; works of fine art and photographs; whereas the WPPT deals with protection for authors rights of performers and producers of phonograms. To maintain a fair balance of interests between the owners of rights and the general public, the treaties further clarify that countries have reasonable flexibility in establishing exceptions or limitations to rights in the digital environment. Indian copyright law

allow fair use of copyrighted work. Section 52 of Indian Copyright Act contains the provisions about the fair use of copyrighted work.

The Copyright Treaties also require countries to provide not only the rights themselves, but also two types of technological adjuncts to the rights i.e. the "**anti-circumvention" provision**, tackles the problem of "hacking" and **"rights management information"**: information which accompanies any protected material, and which identifies the work, its creators, performer, or owner, and the terms and conditions for its use. Two new sections- 65A and 65B has been introduced to the Indian Copyright Act through the Copyright (Amendment) Act, 2012, which provided protection for technological measures and protection for right management information.

Section 44 to 50 of the Indian copyright Act, 1957 included the provisions of registration of copyright.Though registration of copyright is not compulsory but it provided prima facie evidence to the work.

Multimedia contain the content that uses a combination of different forms such as text, audio, images, animations, video and interactive content. The complexity of different work available on a single platform has given rise to the consideration of forming a separate category under the present Copyright laws for future. At present, large numbers of multi-media works are being created by combining pre-existing works. The classification of multi-media works is an issue.

Right of reproduction is most basics of copyright. The actual problem arises when transitory or incidental reproduction that takes place in internet communication creates an issue regarding right to reproduction in digital medium. The Indian Copyright Law covered the right of reproduction in digital medium.[64]

In end we can say, that copyright on internet is a complex issues. Today technology grow much faster than law. It contains legal, moral and also technological issues.

2.5 GLOSSARY

1. **ARTICLE 10(2) OF THE TRIPS AGREEMENT:** Article 10(2) of TRIPS Agreement read as, "Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself."
2. **ARTICLE 2(5) OF THE BERNE CONVENTION:** Article 2 of the Bern Convention tells about the protected works. Article 2(5) read as, "Collections of literary or artistic works such as encyclopedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections."
3. **RAM:** Random-access memory (RAM) is a form of computer data storage that stores data and machine code currently being used.

[64] Section 14

4. **W.E.F.:** It stands for "With Effect From". For example, when a notification reads that the new rules shall apply w.e.f. March 1st, 2018, it means that the new rules shall come into effect on or be implemented/followed from March 1st, 2018, starting from 12:00 a.m. of that particular day.

2.6 SAQS

2. SHORT ANSWER QUESTIONS

(i) Who has the exclusive right to frame laws on the subject of copyright?

(ii) From which amendment act the performer rights that were protected for 25 years previously, extended to 50 years?

(iii) Is the storage of a protected work in digital form in an electronic medium constitutes a reproduction?

3. FILL IN THE BLANKS

(ix) The first Copyright Act for India was the replica of the ----------with few modifications.

(x) Websites are software hence it may be copyrighted under the category of ---------- .

4. TRUE AND FALSE TYPE QUESTIONS

(i) India received modern Copyright Law as a gift from its colonial rules. (true/false)

(ii) India is not a member of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). (true/false)

2.7 REFERENCES

1. https://novojuris.com/2016/09/13/indian-copyright-act-now-covers-internet-and-online-streaming-statutory-licensing-requirements/
2. http://www.livelaw.in/reflections-five-years-copyright-amendment-act-2012/
3. http://shodhganga.inflibnet.ac.in/bitstream/10603/61938/11/11_chapter%204.pdf
4. https://en.wikipedia.org/wiki/Copyright_law_of_India
5. Indian Copyright Act, 1957
6. http://www.wipo.int/copyright/en/activities/internet_treaties.html
7. http://www.wipo.int/treaties/en/ip/wct/summary_wct.html
8. WIPO Copyright treaty, 1996 WIPO Copyright Treaty- http://trade.ec.europa.eu/doclib/docs/2003/october/tradoc_111709.pdf
9. WIPO Performance and Phonogram Treaty- http://www.niscair.res.in/jinfo/JIPR/JIPR%202(3)%20(WIPOPerformance%20and%20Phonograms%20Treaty).pdf
10. The World Intellectual Property organization- the Center for Internet & Society; https://cis india.org/telecom/knowledge-repository-on-internet-access/wipo
11. https://en.wikipedia.org/wiki/Multimedia
12. http://14.139.60.114:8080/jspui/bitstream/123456789/935/1/007_Copyright%20Law%20and%20the%20Internet.pdf
13. http://www.wipo.int/export/sites/www/copyright/en/activities/pdf/wct_wppt.pdf
14. The constitution of India

2.8 SUGGESTED READINGS

1. The Indian Copyright Act, 1957
2. WIPO performance and Phonogram Treaty
3. WIPO Copyright Treaty
4. World intellectual Property Organization
5. Bern Convention

2.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

1. What do you understand by the provision of fair use of copyrighted work in the Indian copyright Act?
2. Describe the Technological Protection Measures and Rights Management Information-the new technological safeguards introduced by the WIPO Copyright Treaty.
3. 'Although the India is not a member of WIPO Copyright Treaty, the right of communication to the public in the Indian Copyright law is seen fully compatible to the definition given by WCT'. Comment.
4. Write short note on 'protection of multimedia under copyright'.

2.10 ANSWER

SAQS

1. (i) Central Government; see 2.3.1 (ii) The Copyright (Amendment) Act, 1999; see 2.3.1.5 (iii) Yes; see 2.3.4.3

2. (i) British Copyright Act of 1911; see 2.3.1 (ii) Computer program; see 2.3.4.1

3. (i) true; see 2.3.1 (ii) true; see 2.3.1

Terminal question and modern question

1. See 2.3.4.5
2. See 2.3.6
3. See 2.3.4.4
4. See 2.3.4.2

UNIT 3

JURISDICTION ISSUES AND COPYRIGHT

STRUCTURE

3.1 INTRODUCTION

3.2 OBJECTIVES

3.3 SUBJECT

3.3.1 CONCEPT OF JURISDICTION

3.3.1.1 JURISDICTION WITHIN A COUNTRY'S LEGAL SYSTEM

3.3.1.2 JURISDICTION OF VARIOUS COURTS IN INDIA

3.3.1.3 JURISDICTION ISSUES ON INTERNET

3.3.2 DEVELOPMENT OF INTERNATIONAL COPYRIGHT LAW: A BRIEF HISTORY

3.3.3 JURISDICTION AND INDIAN COPYRIGHT ACT

3.3.3.1 JURISDICTION BY CONSENT

3.3.3.2 JURISDICTION OVER NON-RESIDENT OF INDIA

3.3.4 ONLINE COPYRIGHT ISSUE AND INFORMATION TECHNOLOGY ACT, 2000: PROVIDING LONG ARM JURISDICTION

3.3.5 INTERNATIONAL ASPECTS OF JURISDICTIONAL ISSUES RELATED TO COPYRIGHT

3.3.5.1 THEORIES OF JURISDICTION

3.3.5.2 QUESTION ABOUT PLACE FOR INSTITUTING A SUIT

3.3.5.2.1 POSITION IN EUROPE

3.3.5.2.2 POSITION IN UNITED STATES

3.4 SUMMARY

3.5 GLOSSARY

3.6 SAQS

3.7 REFERENCES

3.8 SUGGESTED READINGS

3.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

3.10 ANSWER SAQS

3.1 INTRODUCTION

Copyright is the exclusive and assignable legal right, given to the creator or originator, to print, publish, perform, film or record literary or musical material. These exclusive right are given for a fixed time period. Jurisdiction is the official power to make legal decisions and judgement. Jurisdiction is bound by the territory. Every court of law has its own territorial limit. In other words the power of a court of law to carry out legal judgements or to enforce law. Every country has its territorial boundary. A work originate in a country cannot limited to its own nation. In this digital age the world become a small village and digital world has no physical boundary. Internet becomes the easy and cheapest medium to access any work. Hence in a digital world which has no physical boundary, an issue related to law and jurisdiction which has limited to physical boundaries, is very complex and of urgent interest.

In the previous unit we read about copyright and related laws. In the present unit we read about jurisdiction and discuss its issues related to copyright.

3.2 OBJECTIVES

After reading this unit you will be able to understand the following-

- Concept of Jurisdiction
- Classification of jurisdiction
- Different theories of jurisdiction
- Internet and jurisdiction issues
- Indian Copyright law and jurisdiction issues
- How jurisdiction apply on non-residence of India
- Long arm jurisdiction in the matter of copyright
- The court of jurisdiction in different countries over the matter of copyright issues

3.3 SUBJECT

3.3.1 CONCEPT OF JURISDICTION

'Jurisdiction' is the concept where by in any legal system, the power to hear or determine a case is vested in an appropriate court. The justice delivery system of any legal system operates through structures called 'courts' and the starting point of such functionality is that of 'jurisdiction' by which the verdict of the court becomes validated as a proper 'judgment' to be carried in accordance with law. Jurisdiction is important because it limits the power of a court to hear certain cases. If courts did not exercise appropriate jurisdiction, every court could conceivably hear every case brought to them, which would lead to confusing and contradictory results.[65]

3.3.1.1 JURISDICTION WITHIN A COUNTRY'S LEGAL SYSTEM

The legal system of a country operates through the process of jurisdiction, which can be classified as:[66]

a. Pecuniary jurisdiction

[65] See Unit 4. Concept of Jurisdiction; FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENC
[66] Ibid

b. Subject matter jurisdiction
c. Territorial matter jurisdiction

a. Pecuniary jurisdiction- Here the jurisdiction operates on a set monetary limit of the value of dispute and accordingly courts have to be approached.

b. Subject matter jurisdiction: The subject matter jurisdiction specifies the nature of the jurisdiction based on the type of disputes that are involved. For example, a family court will be place for initiating a dispute on divorce.

Territorial matter jurisdiction: The territorial matter of jurisdiction involves the geographical factor where the dispute can be brought before a particular type of court.

3.3.1.2 JURISDICTION OF VARIOUS COURTS IN INDIA

In Indian context, the jurisdiction issue is uniform as the statutes are enacted for the entire country and for all states. With the advent of the internet and the transmission of information and transacting of business across borders, a host of issues have cropped up on the legal front. The traditional approach to jurisdiction invites a court to ask whether it has the territorial, pecuniary, or subject matter jurisdiction to entertain the case brought before it. With the internet, the question of 'territorial' jurisdiction gets complicated largely on account of the fact that the internet is borderless.[67]

3.3.1.3 JURISDICTION ISSUES ON INTERNET

The Internet touches every country in the world. That universality is a great part of its strength as a tool for business as well as also creates unique business risks. Worldwide access exposes web site operators and Internet publishers to the possibility of being hailed into courts around the globe. Businesses must therefore determine the extent to which they should conform to various local laws; they must predict not only where they can expect to be sued, but also which jurisdiction's law will apply. Several recent cases illustrate the increasing dangers of web sites being subject to the laws of countries outside which they are based. These cases also illustrate that not all web sites are created equal, and that questions of jurisdiction often depend on the facts in an individual case and the particular cause of action. These factors, along with the rapid growth of the Internet and the lack of technological expertise of many courts and regulators, have led to a growing and often inconsistent body of law relating to jurisdiction. However, a pattern is gradually emerging that suggests that a web site should only be subject to the laws of the state in which its server is located, although this result depends in large part upon the interactivity of the web site and the extent to which it is targeted to a particular forum. Still, the need for a more stable legal framework for businesses has led to several efforts to create universal and predictable laws.[68]

[67] See Unit 6. Indian Context of Jurisdiction; FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENCE

[68] See unit 7. International Position of internet Jurisdiction; cases In cyber Jurisdiction; FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENCE

3.3.2 DEVELOPMENT OF INTERNATIONAL COPYRIGHT LAW: A BRIEF HISTORY

We cannot deny the fact that for every work there is an originator or creator of that work. Hence for any work there is only one originator of that work in the whole world, but the protection given to the originator is not alike throughout the world due to lacking of a universal copyright law. With the advent of internet this situation become worst.

Intellectual property rights are indispensable territorial, it means, it can be protected in one territory only. Copyright needs principle of national treatment. If any jurisdiction issue arises, copyright owner will be treated as nationals of that territory in which the issue arises and can claim the protection of copyright laws there.

In the past (during 17th-18th century) it is easy of copying any copyrighted work in a foreign country. Today this situation is completely changed due to the international conventions i.e. Bern convention, Universal Copyright convention, Rome convention and WIPO Copyright treaty.

Copyright developed out of the same system as royal patent grants to the inventor. British sovereign granted letter (letters patent) to the patentee providing some dignity, office, privilege, franchise, or monopoly, including monopoly rights in an invention. Similar royal patent were given to the certain authors and printers, by which the exclusive right to publish books and other materials. The purpose of such grants was not to protect authors' or publishers' rights but to raise government revenue and to give the government control over the contents of publication. This system was in effect in late 15th-century Venice as well as in 16th-century England, where the London Stationers' Company achieved a monopoly on the printing of books and was regulated by the Court of Star Chamber[69].

The Statute of Anne, passed in England in 1710, was a milestone in the history of copyright law. It recognized that authors should be the primary beneficiaries of copyright law and established the idea that such copyrights should have only limited duration (then set at 28 years), after which works would pass into the public domain. Similar laws were enacted in Denmark (1741), the United States (1790), and France (1793). During the 19th century most other countries established laws that protected the work of native authors.[70]

Later during the industrial age with the development of technology mean of communication increases and simultaneously theft of native intellectual property also increases. That time India was under the British rule. In 1852 France extended the protection of its copyright laws to all authors, regardless of nationality. It started an international movement about awareness of copyright. In 1886, representatives of 10 countries adopted the Berne Convention at Bern (Switzerland), which is formally known as the International Convention for the Protection of

[69] Court of Star Chamber grew out of the medieval king's council as a supplement to the regular justice of the common-law courts. https://www.britannica.com/topic/copyright#ref157949
[70] https://www.britannica.com/topic/copyright#ref157949

Literary and Artistic Works. Thus beginning of international system of copyright was established.

In the core of the Berne Convention's provision was that each of the contracting countries shall provide automatic protection for works first published in other countries of the Berne union and for unpublished works whose authors are citizens of or resident in such other countries. Protection must be based on the principal of the 'automatic protection'.[71] The Bern convention revised time to time and amended in 1979. At present there are 176 signatory countries out of 195 countries in the world today.

Universal Copyright Convention Adopted at Geneva, 6 September 1952. According to the UCC, "The Contracting States, Moved by the desire to assure in all countries copyright protection of literary, scientific and artistic works, Convinced that a system of copyright protection appropriate to all nations of the world and expressed in a universal convention, additional to, and without impairing international systems already in force, will ensure respect for the rights of the individual and encourage the development of literature, the sciences and the arts, Persuaded that such a universal copyright system will facilitate a wider dissemination and increase international understanding."[72] The UCC was developed by United Nations Educational, Scientific and Cultural Organization (UNESCO) as an alternative to the Berne Convention for those states which disagreed with aspects of the Berne Convention, but still wished to participate in some form of multilateral copyright protection.

The Rome Convention secures protection in performances for performers, in phonograms for producers of phonograms and in broadcasts for broadcasting organizations. Total signatory countries are 93.

The WIPO Copyright Treaty (WCT)[73] is a special agreement under the Berne Convention which deals with the protection of works and the rights of their authors in the digital environment. In addition to the rights recognized by the Berne Convention, they are granted certain economic rights. The Treaty also deals with two subject matters to be protected by copyright: (i) computer programs, whatever the mode or form of their expression; and (ii) compilations of data or other material ("databases"). The signatory countries of this treaty are 96.[74]

We see that Berne and the UCC cover literary, artistic and scientific works. Rome and the WCT extend the international system of protection to additional works. If the work is covered by one of the conventions, the copyright owner can take advantage of national treatment

3.3.3 JURISDICTION AND INDIAN COPYRIGHT ACT

[71] http://www.wipo.int/treaties/en/ip/berne/summary_berne.html
[72] Preamble of UCC;
http://www.tauvisual.com/copyrightlaws/convenzione_internazionale_copyright_ginevra1952.pdf
[73] See Unit 3; Copyright in Internet
[74] http://www.wipo.int/treaties/en/ip/wct/

Section 62 of the Indian Copyright Act, 1957 says about the Jurisdiction of court over matters arising out of copyright infringement. This section says—

(1) Every suit or other civil proceeding arising under this Chapter in respect of the infringement of copyright in any work or the infringement of any other right conferred by this Act shall be instituted in the district court having jurisdiction.

(2) For the purpose of sub-section (1), a "district court having jurisdiction" shall, notwithstanding anything contained in the Code of Civil Procedure, 1908 (5 of 1908), or any other law for the time being in force, include a district court within the local limits of whose jurisdiction, at the time of the institution of the suit or other proceeding, the person instituting the suit or other proceeding or, where there are more than one such persons, any of them actually and voluntarily resides or carries on business or personally works for gain.

According to the sub section (1) 'district court have jurisdiction' of all cases of infringement of copyright. Subsection (2) of the section 62 make a departure to the general rule established by the section 20 of the Civil Procedure Code. Section-20 of CPC states "every suit shall be instituted in a court within the local limits of whose jurisdiction-

(a) the defendant, or each of the defendants where there are more than one, at the time of commencement of the suit, actually and voluntarily resides, or caries on business, or personally works for gain; or
(b) any of the defendants, where there are more than one, at the time of the commencement of the suit, actually and voluntarily resides, or carries on business, or personally works for gain, as aforesaid acquiesce in such institution; or
(c) the cause of action, wholly or in part arise.
Explanation-I. A corporation shall be deemed to carry on business at its sole or principal office in India or, in respect of any cause arising at any place where it has subordinate office, at such place.
Hence 'a cause of action' whether wholly or partly will determine the validity of the suit under section 20 (c) of the Code of Civil Procedure. Here the choice of jurisdiction primarily governed by the convenience of the defendant.[75]
Section 62 (2) of copyright act reverse the rule of territorial jurisdiction, as given in the code of civil procedure. It allow the plaintiff to sue where the plaintiff, 'actually and voluntarily resides or carries on business or personally works for gain'. The reason behind making this exception was that an artist or copyright owner must have total control and dominance over his 'copyright in a work'. He/she has the right to carry his right to sue wherever he/she resides or moves to reside or carries on business or moves to carry on business, irrespective of where the cause of action or infringement arises. The report of the Joint Committee published in the Gazette of India dated 23-11-1956 which preceded and laid the foundation for Section 62(2) said: "In the opinion of the Committee many authors are deterred from instituting infringement proceedings because the court in which such proceedings are to be instituted is situated at a

[75] See unit-6; INDIAN CONTEXT OF JURISDICTION (FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENCE)

considerable distance from the place of their ordinary residence. The Committee feels that this impediment should be removed and the new sub-clause (2) accordingly provides that infringement proceedings may be instituted in the district court within the local limits of whose jurisdiction, the person instituting the proceedings ordinarily resides, carries on business, etc." Thus it provided ease and convenience to the author, the core essence of copyright protection.[76]

3.3.3.1 JURISDICTION BY CONSENT

If the contracting parties consent specifically to have a jurisdiction of a particular place, it would be binding on the parties and cannot later turn the argument that the court has no jurisdiction on general grounds. In the case of *Ms. Nariman Films vs. Delip R. Mehta and others,* the plaintiff was running their business at 'A' and the defendant resides at 'B'. Both parties decided by consent to carry legal proceedings at "'B'.[77]

3.3.3.2 JURISDICTION OVER NON-RESIDENT OF INDIA

In India, there are a large number of cases where Courts have exercised jurisdiction over non-resident defendants. Recently, Justice Sanjay Kishan Kaul in a hotly contested matter on jurisdiction examined the entire conspectus of the law in different jurisdictions[78]. The case, *India TV (Independent News Service Ltd) Vs. India Broadcast Live LIC & Others* related to the domain name Indiatvlive.com registered and used by the defendants as a domain name for video streaming of Indian television channels. After the commencement of the action in the Delhi High Court, the defendants filed a 'Reverse Domain name Hijacking' action in Arizona against India TV. The court was concerned with two issues, viz. (a) Exercise of jurisdiction over the defendants located in the US, (b) Whether an injunction ought to be granted restraining the defendants from proceeding with the suit filed in the United States?

On this issue the Court followed the principles laid down in Modi Entertainment Network and another[79]. In the said case the Hon'ble Supreme Court of India had held as, 'The courts in India like the courts in England are courts of both law and equity. The Principles governing grant of injunction-an equitable relief- by a court will also govern grant of anti-suit injunction which is but a species of injunction. When a court restrains a party to a suit/proceeding before it from instituting or prosecuting a case in another court including a foreign court, it is called anti-suit injunction. It is a common ground that the courts in India have power to issue anti-suit injunction to a party over whom it has personal jurisdiction in an appropriate case. This is because courts of equity exercise jurisdiction *in personam*. However, having regard to the rule of comity, this power will be exercised sparingly because such an injunction though directed against a person, in effect causes interference in the exercise of jurisdiction by another court.
In so far as the position in this country is concerned, there is no 'long arm' statute as such which deals with jurisdiction as regards non- resident defendants. Thus, it would have to be seen whether the defendant's activities have a sufficient connection with the forum state (India); whether the cause of action arises out of the defendant's activities within the forum and whether

[76]http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/jipr/Fulltextsearch/2004/November%202004/JIPR-vol%209-November%202004-pp%20557-567.htm
[77] Intellectual Property law by Dr. C.P. Singh; Allahabad law agency Publication. P.164
[78] Judgment dated 10.7.07 in CS (OS) No. 102 of 2007;MANU/DE11703/2000

[79] *Modi Entertainment Network v. WSC Cricket Pvt Ltd (2003) (4) SCC 341; MANU/SCI0039/2003*

the exercise of jurisdiction would be reasonable. The above review also establishes the manner in which the judiciary in India is pro-active and even in the absence of clear statutory provisions, the attempt is to uniform the law and to strike the right balance rather than alienate India from the rest of the world.[80]

3.3.4 ONLINE COPYRIGHT ISSUE AND INFORMATION TECHNOLOGY ACT, 2000: PROVIDING LONG ARM JURISDICTION

The Internet is an interstate and international medium. The global nature of the internet - both its global reach and its perceived "boundary less" architecture - presents a host of jurisdictional complexities for any sovereign seeking to define and / or enforce laws regulating its use.

Section 1 (2) of the Information Technology Act, 2000 says, “It shall extend to the whole of India and, save as otherwise provided in this Act, it applies also to any offence or contravention thereunder committed outside India by any person.”

Reading above section with section 75 of said act make it clear that, provisions of this act provides extra-territorial application. Section 75 of this act read as,-

“Act to apply for offence or contravention committed outside India. (1) Subject to the provisions of sub-section (2), the provisions of this Act shall apply also to any offence or contravention committed outside India by any person irrespective of his nationality. (2) For the purposes of sub-section (1), this Act shall apply to an offence or contravention committed outside India by any person if the act or conduct constituting the offence or contravention involves a computer, computer system or computer network located in India.”

Further, If any person accesses or secures access to such computer, computer system or computer network, downloads, copies or extracts any data, computer data base or information from such computer, computer system or computer network including information or data held or stored in any removable storage medium, to modify, destroy, record, transmit data or programme residing within a computer, computer system or computer network and to destroy, alter, delete, add, modify or rearrange any computer resource by any means, without permission of the owner or any other person who is incharge of a computer, computer system or computer network, shall be liable to pay damages by way of compensation not exceeding one crore rupees to the person so affected.[81] Hence provided protection to copyright owner.

The said act also says, that, while adjudging the quantum of compensation, the adjudicating officer shall take the account of the amount of gain of unfair advantage, wherever quantifiable,

[80] See unit-6; INDIAN CONTEXT OF JURISDICTION (FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENCE)
[81] Section 43 of Information Technology Act, 2000

made as a result of the default, the amount of loss caused to any person as a result of the default and the repetitive nature of the default.

Thus we see that, if the copyright is violated intentionally and for earning profit, the quantum of damages will be more as compared to innocent infringement and so affected (penalty may be up to rupees one crore) which is deterrent enough to prevent copyright violation.

Section 79 gives ISP relief from liability in certain cases. Any offence or contravention was committed without the knowledge of Internet service provider or that he had exercised all due diligence to prevent the commission of such offence or contravention, in such cases he shall not be liable under this act.

The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force.[82]

To meet the challenges posed by internet/ information technology, the provisions of Section 1(2) read with Section 75 empower the courts with a 'long arm jurisdiction'. The enforcement of these provisions is, however, a difficult and tiresome task. Section 81 is being a non-obstante clause, will prevail over any other inconsistent law for the time being in force. Secondly, the Information Technology Act being a 'special law', covering the matters pertaining to information technology, would prevail over all other inconsistent and conflicting laws. The Information Technology Act, being a special Act, which is later in point of time, would prevail over the jurisdictional procedures mentioned in other enactments. By incorporating the long arm jurisdiction, has acted in accordance with the well accepted practice all over the world. India is a signatory of the United Nations Commission on International Trade Law (UNCITRAL). And the provisions of the Information technology Act, 2000 are in conformity with the well-established and accepted international standards and norms. Hence, the courts will have the jurisdiction to deal with online copyright issues. In fact, even in the absence of these provisions, the courts in India have the power to incorporate well-accepted international rules and principles if they are in conformity with the municipal laws and are not in conflict with them. In *Gramaphone Company of India Ltd v Birendra Bahadur Pandey*[83] case, the court observed that the comity of Nations requires that rules of international law may be accommodated in the Municipal law even without express legislative sanction provided these do not run into conflict with Acts of Parliament. But if conflict is inevitable, the latter must yield. There is a presumption that Parliament does not assert or assume jurisdiction which goes beyond the limits established by the common consent of nations and statutes are to be interpreted, provided their language permits, so as not to be inconsistent with the comity of nations or with the established principles of international law. But this principle applies only where there is an ambiguity and must give way to a clearly expressed intention. If statutory

[82] Section 81 of Information Technology Act, 2000
[83] AIR 1984 SC 667

enactments are clear in meaning, these must be construed according to their meaning even though they are contrary to the comity of nations or international law.[84]

The Act applies to an offence or contravention committed outside India by any person if the act or conduct constituting the offence or contravention involves a computer, computer system or computer network located in India. Thus, if a person violates the copyright of another, which is stored in electronic form in a computer located in India, then such person would be liable to be tried under the copyright laws of India.

It must be noted that the peculiar features of the Internet makes it highly vulnerable to the jurisdiction of courts all over the world, since it is strongly and compactly built network of computers involving computers located in all the countries of the world. Further, there is nothing in the law, which restricts the courts to combine two provisions of different enactments for rendering complete justice in the facts and circumstances of the case. Thus, the provisions of Sections 1(2), 75 and 81 of the Information Technology Act, 2000 read with Section 53[85] of the Copyright Act, 1957 can provide a viable solution to the jurisdiction problems of all sorts. These provisions get strength also from the well-accepted 'jurisdictional theories', which are uniformly followed in almost all the countries of the world. The jurisdictional issues, relating to online violations of copyright, are not easy to handle. The legal system of each nation reacts differently to these violations. At the international level various treaties and reciprocal arrangements have been adopted to deal with these violations of copyright. These will definitely help in providing strong and effective copyright protection to their owners. The ultimate success of these laws and arrangements would, however, depend on the pro-active role played by the judiciary of the respective nation. If the judiciary, recognizing the need of the hour, takes copyright violations seriously, then the chances of their future violations become nominal.

3.3.5 INTERNATIONAL ASPECTS OF JURISDICTIONAL ISSUES RELATED TO COPYRIGHT

3.3.5.1 THEORIES OF JURISDICTION

Under international law, there are six generally accepted bases of jurisdiction or theories under which a state may claim to have jurisdiction to prescribe a rule of law over an activity. They are:

1. Subjective Territoriality
2. Objective Territoriality
3. Nationality
4. Protective Principle
5. Passive Nationality
6. Universality

[84] AIR 1984 SC 667
http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/jipr/Fulltextsearch/2004/November%202004/JIPR-vol%209-November%202004-pp%20557-567.htm

[85] Section 53 provided the provisions, giving detention rights to the commissioner of customs, of the imported infringing copies.

As a general rule of international law, even where one of the bases of jurisdiction is present, the exercise of jurisdiction must be reasonable.

Subjective territoriality is by far the most important of the six. If an activity takes place within the territory of the forum state, then the forum state has the jurisdiction to prescribe a rule for that activity. The vast majority of criminal legislation in the world is of this type.

Objective territoriality is invoked where the action takes place outside the territory of the forum state, but the primary effect of that activity is within the forum state.

Nationality is the basis for jurisdiction where the forum state asserts the right to prescribe a law for an action based on the nationality of the actor. Under the law of the Netherlands, for example, a Dutch national "is liable to prosecution in Holland for an offence committed abroad, which is punishable under Netherlands law and which is also punishable under the law of the country where the offence was committed."[86] Many other civil law countries have similar laws.

Passive nationality is a theory of jurisdiction based on the nationality of the victim. Passive and "active" nationality are often invoked together to establish jurisdiction because a state has more interest in prosecuting an offense when both the offender and the victim are nationals of that state. Passive nationality is rarely used for two reasons. First, it is offensive for a nation to insist that foreign laws are not sufficient to protect its citizens abroad. Second, the victim is not being prosecuted.

The Protective principle expresses the desire of a sovereign to punish actions committed in other places solely because it feels threatened by those actions. This principle is invoked where the "victim" would be the government or sovereign itself.

The final basis of jurisdiction is universal jurisdiction, sometimes referred to as "universal interest" jurisdiction. Historically, universal interest jurisdiction was the right of any sovereign to capture and punish pirates. This form of jurisdiction has been expanded during the past century and a half to include more of *jus cogens*: slavery, genocide, and hijacking (air piracy). Although universal jurisdiction may seem naturally extendable in the future to Internet piracy, such as computer hacking and viruses, such an extension is unlikely given the traditional tortoise-like development of universal jurisdiction. Just as important, universal jurisdiction traditionally covers only very serious crimes.[87]

3.3.5.2 QUESTION ABOUT PLACE FOR INSTITUTING A SUIT

International treaties and convention says about provisions for protecting copyright of author and inventor but none of these tell about the court, to which has jurisdiction in case of an infringement of authors right. Thus for instituting a suit, the author is dependent on the conventional jurisdiction.

3.3.5.2.1 POSITION IN EUROPE

[86] *Public Prosecutor/Y., HR May and September 1957, 24 Int'l L. Rep. 264, 265 (1957)*.

[87] See Unit 4- CONCEPT OF JURISDICTION; FUNDAMENTALS OF CYBER LAW AND THE EMERGING JURISPRUDENCE

By the Brussels regulation of September 27, 1968 and the Lugano Convention of September 16, 1988, EFTA members established a set of common rules for jurisdiction. The Brussels Regulation applies to disputes between individuals from different Member States of the European Union (EU). The Brussels Regulation applies exclusively to civil and commercial matters. The Brussels Regulation provides general rules with respect to jurisdiction. The basic principle is that the courts of the EU Member State in which the defendant is domiciled will have jurisdiction to hear the dispute, regardless of the defendant's nationality. While the principle of domicile acts as the general rule for determining jurisdiction, a defendant may, under certain circumstances, be sued in the courts of a Member State other than the Member State in which he is domiciled. Brussels Regulation, have 'special jurisdiction' regarding matters relating to tort, delict or quasi-delict.[88] The courts of the Member State in which the harmful event either occurred or may occur will have jurisdiction.

The United Kingdom Supreme Court confirms that, the English Courts have jurisdiction to determine whether foreign copyright has been infringed. In this case, the Supreme Court held that a US copyright infringement action was justiciable in the English courts. Although the infringing acts were taking place in the US, the defendant was a UK national and domiciled here, which gave the English courts personal jurisdiction over him.[89]

As regards English law, the UKSC acknowledged the rule in *British South Africa Co v Companhia de Mocambique and Potter vs Broken Hill Pty Co Ltd* that an English court does not have jurisdiction to determine issues as to the title or right to foreign property. However, the UKSC said this rule should not be extended to the issue of infringement of those property rights where the subsistence of the rights has already been established. As a result, provided personal jurisdiction can be established over the defendant, a claim for the infringement of a foreign copyright is justiciable by the English courts even in the absence of any act of infringement in the UK or under UK law.

This paves the way for foreign claimants to bring proceedings in the UK against British nationals for acts of infringement committed outside the European Union in breach of the copyright law of that country. The UKSC's decision indicates a clear intention to move away from the traditional 'localized' perception of IP rights.[90]

3.3.5.2.2 POSITION IN UNITED STATES

In US law there are two grounds for personal jurisdiction over the parties:

First, General jurisdiction exists if the defendant has continuous and systematic contacts with the forum state. In case, the defendant resides in the forum, or "does business" with the forum, the court will have general judicial competence over him. In other words, the forum is competent to hear all territorial claims against that defendant.

[88] Article 5(3) of Brussels I Regulation
[89] *Lucasfilm Ltd and others v Ainsworth and another* [2011] IP & T 733
[90] https://www.fieldfisher.com/publications/2011/08/uk-supreme-court-rules-on-the-enforceability-of-foreign-copyright-in-the-uk

Second, Specific jurisdiction is based on purposeful acts (infringements) committed by the defendant directed toward the Forum State. The court will have jurisdiction only over a claim relating to the infringement committed in the forum, and not over infringing acts committed outside the forum.

In this way causes of action for copyright infringements may be brought in any court that has jurisdiction over the defendant. This is particularly important as far as Internet infringements are concerned since jurisdiction will not be limited to the *locus delicti* (Internet infringements occur everywhere, so in practice they cannot be enforced anywhere). However, it also presents some potential problems:

1. Internet service providers may become the targeted defendants for copyright infringements committed over the Internet, and claims may pile up in those fora where ISPs are registered for business. For example, since AOL is located in Virginia, Virginia courts have jurisdiction over claims for copyright infringements and torts committed through AOL. However, some courts may not exercise jurisdiction based upon this relationship. In June 1999 a judge in Virginia declined to exercise jurisdiction on a defamation claim over AOL, stating that "just because AOL is based here does not mean Virginia Courts are open to lawsuits involving worldwide Internet communications."[91]

2. Further, based on the general grounds for personal jurisdiction, a trend has emerged in recent years favoring the application of long arm jurisdiction to exercise jurisdiction over websites (and infringements) "located" outside the US. Jurisdiction may not be recognized as such in foreign countries where the infringement actually occurred and where the US decision must eventually be enforced.

A US case, iCrave Tv,[92] is an interesting case and illustrate the complex issues of jurisdiction and choice of law in international copyright infringements on the Internet. iCrave TV, was a Canadian website which picked up broadcast signals from Canadian programs, and from US television programming received across the border. iCrave then converted those signals into video streaming format and made them available via its website. iCrave TV claimed that the acquisition, conversion, and redistribution of the US programming was lawful under Canadian law (pertaining to Canadian law regarding secondary transmissions of broadcast performances). In theory, iCrave TV restricted access to its website to Canadian users only; however, identifying and supplying a Canadian telephone area code easily circumvented this restriction.

US TV producers brought suit in federal court in the Western District of Pennsylvania, where the president and international sales manager of iCrave TV resided. On the basis of this fact the court found general personal jurisdiction over the Canadian business entity. To determine choice of law, the court found sufficient points of attachment with the US to allow the

[91] Bochan v. LaFontaine, 68 F.Supp. 2d 692 (E.D. Va. 1999); https://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?referer=https://www.google.co.in/&httpsredir=1&article=1067&context=annlsurvey

[92] *Twentieth Century Fox Film Corp. v. iCrave TV*, No 00-121 (W.O. Pa. Jan. 20, 2000)

application of the US Copyright Act to the defendants' activities. The court then concluded that the infringement occurred within the US when US citizens received and viewed the unauthorized streaming of the copyrighted materials, disregarding the fact that the streaming transmission began in Canada.

In this case, TV producers were only concerned about infringement in the US, because more than half the subscribers to the website were US residents. But there may be another assumption that, the iCrave TV website was also accessed by a substantial number of people from other countries on other continents.

Under current choice of law and jurisdiction rules, the worldwide claim for infringement could easily have been brought in a US court and would likely have been accepted for the same reasons. However, the choice of law applied might be different. According to *lex loci protectionis,* the US court should apply the domestic laws of every country where the streamed broadcast was received to determine if the broadcast qualified as a "secondary transmission of a broadcast" or as an infringement. This process would not only be expensive and difficult (translations, proof of foreign laws), but also controversial, since the US decision might not be enforced in other countries that do not accept the jurisdiction of the US court. Here the question arises that, Why should a US court deal with an infringement that begins in Canada and ends in the United Kingdom, Argentina, or elsewhere? As an alternative, the producers might bring suit in each country of reception, under each domestic copyright law.

Had the suit been brought in Canada (the country of domicile of the defendant) the chance for enforcement of the decision in all other countries might have been better. The Canadian court could have denied that an infringement occurred, using the grounds that lex loci protectionis is Canadian law (i.e., the law where the transmission started, instead of the laws of each country of reception).[93]

Thus we have seen, the jurisdiction and choice of law issues are inherently related and require homogeneous solutions. Since internet is boundary less regarding as “no men’s land”, there is no one perfect solution to solve the issues of choice of law and jurisdiction for copyright infringement on the Internet.

3.4 SUMMARY

Jurisdiction is the official power to make legal decisions and judgement and bounded by the territory. Copyright is the exclusive and assignable legal right, given to the creator or originator, to print, publish, perform, film or record literary or musical material and cannot bounded by territory.

The legal system of a country operates through the process of jurisdiction, which can be classified on the basis of the value of dispute, type of disputes that are involved and on geographical factor where the dispute can be brought before a particular type of court. Unlike

[93] COPYRIGHT: CHOICE OF LAW AND JURISDICTION IN THE DIGITAL AGE by RAQUEL XALABARDER; https://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?referer=https://www.google.co.in/&httpsredir=1&article=1067&context=annlsurvey

USA, in India the jurisdiction is uniform as the statutes are enacted for the entire country and for all states.

That universality of internet is a great part of its strength as a tool for business as well as also creates unique business risks. Several recent cases illustrate the increasing dangers of web sites being subject to the laws of countries outside which they are based also, that questions of jurisdiction often depend on the facts in an individual case and the particular cause of action. For any work there is only one originator of that work in the whole world, but the protection given to the originator is not alike throughout the world due to lacking of a universal copyright law. Copyright needs principle of national treatment. If any jurisdiction issue arises, copyright owner will be treated as nationals of that territory in which the issue arises and can claim the protection of copyright laws there.

Beginning of international system of copyright was established in 1886, when representatives of 10 countries adopted the Berne Convention at Bern (Switzerland), which is formally known as the International Convention for the Protection of Literary and Artistic Works. The WIPO Copyright Treaty (WCT) in 1996 is a special agreement under the Berne Convention which deals with the protection of works and the rights of their authors in the digital environment.

Section 62 of the Indian Copyright Act, 1957 says about the Jurisdiction of court over matters arising out of copyright infringement. According to it district court having jurisdiction over the issues of copyright infringement. Reading Section 1 (2) of the Information Technology Act, 2000 section with section 75 of said act make it clear that, provisions of this act provides extra-territorial application. Provisions of the Information Technology Act, 2000 makes clear that, in case of copyright is violated intentionally and for earning profit, the quantum of damages will be more as compared to innocent infringement and so affected (penalty may be up to rupees one crore) which is deterrent enough to prevent copyright violation.

The provisions of Sections 1(2), 75 and 81 of the Information Technology Act, 2000 read with Section 53 of the Copyright Act, 1957 can provide a viable solution to the jurisdiction problems of all sorts. These provisions get strength also from the well-accepted 'jurisdictional theories', which are uniformly followed in almost all the countries of the world.

The United Kingdom Supreme Court confirms that, the English Courts have jurisdiction to determine whether foreign copyright has been infringed. In this case, the Supreme Court held that a US copyright infringement action was justiciable in the English courts. Although the infringing acts were taking place in the US, the defendant was a UK national and domiciled here, which gave the English courts personal jurisdiction over him.[94]
In USA Specific jurisdiction is based on purposeful acts (infringements) committed by the defendant directed toward the Forum State. The court will have jurisdiction only over a claim relating to the infringement committed in the forum, and not over infringing acts committed outside the forum. In this way causes of action for copyright infringements may be brought in

[94] *Lucasfilm Ltd and others v Ainsworth and another* [2011] IP & T 733

any court that has jurisdiction over the defendant. A US case, iCrave Tv,[95] is an interesting case and illustrate the complex issues of jurisdiction and choice of law in international copyright infringements on the Internet.

In this way we see that, the legal system of each nation reacts differently to copyright violations. At the international level various treaties and reciprocal arrangements have been adopted to deal with these violations of copyright. These will definitely help in providing strong and effective copyright protection to their owners. The ultimate success of these laws and arrangements would, however, depend on the pro-active role played by the judiciary of the respective nation. If the judiciary, recognizing the need of the hour, takes copyright violations seriously, then the chances of their future violations become nominal.

3.5 GLOSSARY

1. ***in personam***: *In personam* is a Latin phrase meaning "directed toward a particular person". In a lawsuit in which the case is against a specific individual, that person must be served with a summons and complaint to give the court jurisdiction to try the case, and the judgment applies to that person and is called an "*in personam* judgment". *In personam* is distinguished from *in rem*, which applies to property or "all the world" instead of a specific person.
2. ***jus cogens*:** *Jus cogens* (or *ius cogens*) is a latin phrase that literally means "compelling law." It stems from the idea already known in Roman law that certain legal rules cannot be contracted out, given the fundamental values they uphold. Most states and authors agree that *jus cogens* exists in international law. Despite persistent debates on these matters, *jus cogens* is now referred to in several legal instruments within and beyond the law of treaties. Hence *jus cogens* is a peremptory norm, established as a fundamental principle of international law that is accepted by the international community of states as a norm from which no derogation is permitted.
3. **EFTA MEMBERS:** The European Free Trade Association (EFTA) is an intergovernmental organization set up for the promotion of free trade and economic integration to the benefit of its four Member States – Iceland, Liechtenstein, Norway and Switzerland – and the benefit of their trading partners around the world.
4. ***locus delicti*:** *Locus delicti* is a Latin term which means the 'scene of the crime.' It is the place where the crime was committed.
5. ***lex loci protectionis*:** *Lex loci protectionis* is a latin phrase means, the law of the place where the protection is claimed. In other words it is a choice of law rule applied to cases concerning the infringement of intellectual property (IP) rights, such as copyrights or patents.

3.6 SAQS

[95] *Twentieth Century Fox Film Corp. v. iCrave TV*, No 00-121 (W.O. Pa. Jan. 20, 2000)

5. SHORT ANSWER QUESTIONS

(iv) What makes territorial jurisdiction complicated to internet?

(v) Which section of copyright act reverse the rule of territorial jurisdiction, as given in the code of civil procedure?

(vi) Which section of Information Technology Act, 2000 gives ISP relief from liability in certain cases?

6. FILL IN THE BLANKS

(xi) Where the jurisdiction operates on a set monetary limit of the value of dispute and accordingly courts have to be approached, is called----------.

(xii) In Indian context, the jurisdiction issue is ---------as the statutes are enacted for the entire country and for all states.

7. TRUE AND FALSE TYPE QUESTIONS

(i) Jurisdiction is important because it limits the power of a court to hear certain cases. (true/false)

(ii) The Statute of Anne, passed in England in 1710 did not recognized the rights of an author. (true/false)

(iii) Berne and the UCC cover literary, artistic and scientific works. (true/false)

3.7 REFERENCES

1. https://www.squirepattonboggs.com/~/media/files/insights/publications/2012/10/international-aspects-of-copyright/files/international-aspects-of-copyright-practice note/fileattachment/international-aspects-of-copyright-practice-note.pdf
2. https://www.britannica.com/topic/copyright#ref157949
3. http://www.wipo.int/treaties/en/ip/berne/summary_berne.html
4. http://www.tauvisual.com/copyrightlaws/convenzione_internazionale_copyright_ginevra 1952.pdf
5. http://www.wipo.int/treaties/en/ip/wct/
6. http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/jipr/Fulltextsearch/2004/November%202004/JIPR-vol%209-November%202004-pp%20557-567.htm
7. Information Technology Act, 2000
8. https://www.fieldfisher.com/publications/2011/08/uk-supreme-court-rules-on-the-enforceability-of-foreign-copyright-in-the-uk
9. https://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?referer=https://www.google.co.in/&httpsredir=1&article=1067&context=annlsurvey
10. COPYRIGHT: CHOICE OF LAW AND JURISDICTION IN THE DIGITAL AGE by RAQUEL XALABARDER; https://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?referer=https://www.google.co.in/&httpsredir=1&article=1067&context=annlsurvey
11. Indian Copyright Act, 1957

3.8 SUGGESTED READINGS

1. Indian Copyright Act, 1957

2. Information Technology Act, 2000
3. Universal Copyright Convention
4. https://www.britannica.com/topic/copyright#ref157949
5. http://www.wipo.int/treaties/en/ip/wct/

3.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

1. What types of jurisdictions are found within a country's legal system? Write in brief.
2. That universality is a great part of its strength as a tool for business as well as also creates unique business risks. Comment.
3. Write a short note on the development of international copyright law.
4. What is the significance of WIPO Copyright Treaty?
5. Explain the provisions under the Indian Copyright Act, 1957 over the matters related to the copyright infringement.
6. 'Section 62(2) provided ease and convenience to the author, the core essence of copyright protection.' Comment.
7. Do you think, that Information Technology Act, 2000 providing long arm jurisdiction? Explain.
8. Describe the international theories of jurisdiction.
9. Is foreign copyright infringement action was justiciable in the English courts. Comment.
10. The case of *iCrave Tv*, illustrate the complex nature of jurisdiction and choice of law in international copyright infringements on the Internet. Comment.
11. Write an essay on the 'jurisdiction issues and copyright.

3.10 ANSWER

SAQS

1. (i) Borderless architecture of internet; see 3.3.1 (ii) Section 62 (2); see 3.3.3 (xiii) Section 79; see 3.3.4
2. (i) pecuniary jurisdiction; see 3.3.1.1 (ii) uniform; see 3.3.1.2
3. (i) true; see 3.3.1 (ii) false; see 3.3.2 (iii) true; see3.3.2

Terminal questions and model questions

1. See 3.3.1.1
2. See 3.3.1.3
3. See 3.3.2
4. See 3.3.2
5. See 3.3.3
6. See 3.3.3
7. See 3.3.4
8. See 3.3.5.1
9. See 3.3.5.2.1
10. See 3.3.5.2.2

UNIT 4

INFRINGMENT, REMEDIES OF INFRINGMENT

STRUCTURE

4.1 INTRODUCTION

4.2 OBJECTIVES

4.3 SUBJECT

4.3.1 RATIONALLY OF COPYRIGHT

4.3.2 INFRINGMENT OF COPYRIGHT

4.3.2.1 WHEN COPYRIGHT INFRINGED

4.3.2.1.1 OWNER OF THE COPYRIGHT

4.3.2.1.2 THE EXCLUSIVE RIGHT CONFERRED UPON THE OWNER OF THE COPYRIGHT

4.3.2.1.2.1 ECONOMIC RIGHTS

4.3.2.1.2.2 MORAL RIGHTS

4.3.2.1.3 COMMUNICATION TO THE PUBLIC

4.3.2.1.4 INFRINGING COPYRIGHT BY MAKING SALE, HIRE AND TRADE OF A COPYRIGHTED WORK

4.3.2.1.5 SPECIAL PROVISIONS REGARDING TO THE SOUND RECORDIND AND VIDEO FILMS

4.3.2.1.6 IMPORTATION OF INFRINGING COPIES INTO INDIA

4.3.3 CERTAIN ACTS NOT TO BE INFRINGEMENT OF COPYRIGHT

4.3.4 REMEDIES FOR INFRINGEMENT

4.3.4.1 CIVIL REMEDIES

4.3.4.1.1 JURISDICTION OF COURT

4.3.4.1.2 DEFINITION OF OWNER OF COPYRIGHT

4.3.4.1.3 PRESUMPTION OF AUTHOR OR PUBLISHER OF THE WORK

4.3.4.1.4 ANTON PILLAR ORDER

4.3.4.1.5 INJUNCTION AGAINST INFRINGEMENT OF COPYRIGHT

4.3.4.1.6 COMPENSATORY CIVIL REMEDIES

4.3.4.1.7 PROTECTION OF SEPARATE RIGHTS

4.3.4.1.8 REMEDY IN THE CASE OF GROUNDLESS THREAT OF LEGAL PROCEEDINGS

4.3.4.1.9 CIVIL REMEDIES ARE NOT AVAILABLE IN THE CASE OF WORKS OF ARCHITECTURE

4.3.4.2 CRIMINAL REMEDIES

4.3.4.2.1 OFFENCE OF INFRINGEMENT OF COPYRIGHT OR OTHER RIGHTS-SECTION 63

4.3.4.2.2 KNOWINGLY USING OF INFRINGING COPIES OF COMPUTER PROGRAMME

4.3.4.2.3 POSSESSION OF PLATES USED FOR MAKING INFRINGING COPIES

4.3.4.2.4 MAKING FALSE ENTRIES IN REGISTER, ETC., FOR PRODUCING OR TENDERING FALSE ENTRIES

4.3.4.2.5 MAKING FALSE STATEMENTS FOR THE PURPOSE OF DECEIVING OR INFLUENCING ANY AUTHORITY OR OFFICER

4.3.4.2.6 CONTRAVENTION OF SECTION 52A

4.3.4.2.7 OFFENCES BY COMPANIES

4.3.4.2.8 PROTECTION OF TECHNOLOGICAL MEASURES AND PROTECTION OF RIGHTS MANAGEMENT INFORMATION

4.3.4.2.9 POWER OF POLICE TO SIEZE INFRINGING COPIES, UNDER OFFENCE OF SECTION 63

4.3.4.3 ADMINISTRATIVE REMEDIES

4.3.4.4 APPELLATE REMEDIES

4.3.4.4.1 APPEALS AGAINST CERTAIN ORDERS OF MAGISTRATE – SECTION 71

4.3.4.4.2 APPEALS AGAINST ORDERS OF REGISTRAR OF COPYRIGHTS AND APPELLATE BOARD – SECTION 72

4.3.4.5 A PERSON CAN OBTAIN CIVIL AND CRIMINAL REMEDIES SIMULTANIOUSLY

4.4 SUMMARY

4.5 GLOSSARY

4.6 SAQS

4.7 REFERENCES

4.8 SUGGESTED READINGS

4.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

4.10 ANSWER SAQS

4.1 INTRODUCTION

In the previous units we read about copyright, its subject matter and definition of copyright. We also read the development of copyright law, its universality. Copyright protection is the most important subject of various international conventions and treaties. In recent years development of digital technology and advent of internet poses a serious attack on copyright. Violation of copyright is possible through a click. Under copyright protection the center is ‘originality’. Duplication, alternation or copying of copyright material without permission of originator is count under infringement. To protect the owner’s rights copyright law provides various remedies and punishments to the infringer. There are preventive as well as

compensatory remedies provided for relief to the owner of work. Imprisonment and fine for the infringement of others copyright, are provided as criminal offences. Administrative and appellate remedies are also available for providing justice under the Indian Copyright Law.

4.2 OBJECTIVES

After reading this unit you are able to understand the following:

- Those acts that makes a copyrighted work infringed
- Subject matter of infringement
- Who is the owner of copyright and the exclusive right conferred upon him under the Indian Copyright Act
- Economic and social rights of the owner of the work
- What are special provisions regarding to the sound recording and video films
- Those act which are not counted as infringement of copyright
- Civil remedied provided against the infringement of copyright
- Criminal remedies provided against the infringement of copyright
- Administrative remedies provided against the infringement of copyright
- Appellate remedies provided to the aggrieved person against the orders and final decision of court, registrar of copyright and appellate board under the copyright act
- Incidental power of the police and court
-

4.3 SUBJECT

4.3.1 RATIONALLY OF COPYRIGHT

Creativity and originality need protection and rewarding. Creativity is the key of invention which ultimately the key of progress. If there is no protection of creativity, no one spend time and money for invention. Rewarding creativity through copyright giving exclusive authority on the creation is necessary to create more and motivate others to create.

We have already discuss the subject matter in which copyright is subsist. Here we shall take a short review of the work that enjoy the copyright protection under the current up to date amended legislation:

- Literacy works;
- Dramatic works;
- Musical works;
- Artistic work including sculpture, painting, engraving, architect[96] and all works where artistic craftsmanship is involved;[97]
- Cinematograph film;
- Sound recording

[96] Subs. by Act 38 of 1994, s. 2, for "architectural work of art" (w.e.f. 10-5-1995).
[97] Section 2(c) of Indian Copyright Act, 1957

- Literary, dramatic works or musical works in the form of computer programme or computer generated programme including computer software;
- Adaptation, Translation and Reproduction of work;
- Creating unpublished works;[98]
- Foreign works including the works of international Organisation;
- Literary works such as poems, articles, works of fiction, factual works such as encyclopedias as dictionaries etc.;
- Question papers set for the examination;[99]
- Research theses and dissertations prepared by students;[100]
- Compilation of a book on household and accounts and domestic arithmetic;[101]
- Schools textbooks;[102]
- Guide books;[103]
- Dictionary;[104]
- A book of scientific questions and answers;[105]
- Questionnaire for collecting statistical information;[106]
- Head notes of a judgment;[107]
- Lecture notes have all come under the class of literary works entitles for copyright protection.
- Musical work such as songs operas, instrumental music etc.;
- Works of art and architecture;
- Photographs, technical drawings, motion picture (Cinematograph film), computer progamme etc.;
- Live performance of a drama fixed in a storage devise such as a compact disk etc.

In *Blackwood Vs Parasuraman*[108], Madras High Court held that: "translation of literary work is itself a literary work and is entitled to copyright protection, reproduction of publication of translation without consent or license of the owner of copyright in the original would amount to infringement.

i. performance by an amateur club or society if the performance is given to a non-paying audience, and

[98] When any idea or expression takes material form, it cover under copyright, weather it published or not.
[99] *Jagdish Prasad Vs Parmeshwar Prasad*, AIR 1966 PAT 33.
[100] *Fatesh Singh Mehta Vs Singha*l, AIR 1990 RAJ 8(14).
[101] *Manohar Lal Gupta Vs State of Haryana*(1 977) 79 PUNJ LR 181 (Del)
[102] *Shaikh Ghafoor Bakhsh and Sons Vs Jwala Prasad Singhal,* AIR 1921 ALL 95
[103] *E.M. Foster Vs A.M. Parasuram,* AIR 1964 MAD 331.
[104] *Givinddan Vs Gopalkrishnan*, AIR 1955 MAD 319
[105] *Joral Vs Roulston* (1857) 3 Kay & J 708
[106] *Interfirm Comparison(Australia) Pty Ltd. Vs Law Society of New South Wales*, (1977) RPC 149
[107] *N.T. Raghunathan Vs All India Reporter,* AIR 1971 Born. 48
[108] AIR 1959 MAD 410

ii. the making of sound recordings of literary, dramatic or musical works under certain conditions.

4.3.2 INFRINGMENT OF COPYRIGHT

4.3.2.1 WHEN COPYRIGHT INFRINGED

Section 51 of Indian Copyright Act, 1957 says about the 'infringement'. It reads as follows-

"Copyright in a work shall be deemed to be infringed—

(a) when any person, without a licence granted by the owner of the copyright or the Registrar of Copyrights under this Act or in contravention of the conditions of a licence so granted or of any condition imposed by a competent authority under this Act—

(i) does anything, the exclusive right to do which is by this Act conferred upon the owner of the copyright, or

(ii) permits for profit any place to be used for the communication of the work to the public where such communication constitutes an infringement of the copyright in the work, unless he was not aware and had no reasonable ground for believing that such communication to the public would be an infringement of copyright; or

(b) when any person—

(i) makes for sale or hire, or sells or lets for hire, or by way of trade displays or offers for sale or hire, or

(ii) distributes either for the purpose of trade or to such an extent as to affect prejudicially the owner of the copyright, or

(iii) by way of trade exhibits in public, or

(iv) imports into India, any infringing copies of the work:

Provided that nothing in sub-clause (iv) shall apply to the import of one copy of any work for the private and domestic use of the importer.

Explanation.— For the purposes of this section, the reproduction of a literary, dramatic, musical or artistic work in the form of a cinematograph film shall be deemed to be an "infringing copy".

Thus infringement of copyright constitutes in the circumstances when any person does any act without the permission of copyright owner or registrar of copyright, which intervene directly or indirectly to the exclusive rights of the copyright owner. Also any act which Contravene any term and condition granted to copyright owner, legally under this act, make offence of infringement. Making any profit from the work by any person, which is not have any such right on that work also constitutes the act of infringement. Import of infringing copies into India is also constituting the infringement of copyright.

Making any video and audio from any copyrighted literary, dramatic, musical or artistic material without the permission of owner is come under violation of copyright.

From the above discussion it becomes clear that, two conditions are necessary for the making an offence against copyright. First condition is that, if in a work there is similarity with any of the preexisting work, it shall be deemed to be an infringement. It is noteworthy to mention here that the preexisting work should not be in public domain, it must be copyrighted under the Indian Copyright Act. Second condition is that, the infringed work must be directly or indirectly[109] derived from the copyrighted work.

4.3.2.1.1 OWNER OF THE COPYRIGHT

Section 51(a) of the Indian Copyright Act, says, "when any person, without a licence granted by the owner of the copyright or the Registrar of Copyrights under this Act…". Here question arises that, who is the owner of the copyright? Generally, in any work the author is the first owner of the copyright[110]. According to section 2(d) "author means"

(i) in relation to a literary or dramatic work, the author of the work;
(ii) in relation to a musical work, the composer[111];
(iii) in relation to an artistic work other than a photograph, the artist;
(iv) in relation to a photograph, the person taking the photograph;
(v) in relation to a cinematograph film or sound recording, the producer; and
(vi) in relation to any literary, dramatic, musical or artistic work which is computer-generated, the person who causes the work to be created;
(vii) in the case of any address or speech delivered in public, the person who has delivered such address or speech or if such person has delivered such address or speech on behalf of any other person, such other person shall be the first owner of the copyright;
(viii) in the case of a Government work, Government shall, in the absence of any agreement to the contrary, be the first owner of the copyright;
(ix) in the case of a work made or first published by or under the direction or control of any public undertaking, such public undertaking shall, in the absence of any agreement to the contrary, be the first owner of the copyright;

In a musical sound recording there are many right holders. It is necessary to obtain licence to each right holder i.e. the lyricist, who gives the words to song; composer; singer, who sing the song; musician (s), who gives background music and the company or person who produced the sound recording.

Section 30 of the Copyright Act, 1957 empowers the owner of copyright to grant an interest in the right by a license in writing. The contract specifies as to what rights have been licensed and for what duration.

[109] *Sumanglam R. Jaylakshmi vs. Meta Musicals*, 2001 (1) RAJ 150; Intellectual Property Rights and the law by dr. G.B. Reddy; Gogia Law Agency, P.144
[110] Section 17 of Indian Copyright Act, 1957;
[111] "composer", in relation to a musical work, means the person who composes the music regardless of whether he records it in any form of graphical notation; section 2(ffa) of Indian Copyright Act, 1957;

"the Registrar of Copyrights under this Act" means the person appointed by the Central Government under the provision of this act[112], as 'Registrar of Copyright' or a Deputy Registrar of Copyright appointed by Central Government, act as a Registrar under the superintendence and direction of the Registrar of Copyrights[113].

4.3.2.1.2 THE EXCLUSIVE RIGHT CONFERRED UPON THE OWNER OF THE COPYRIGHT

As the section 51 (a)(i) says, " the exclusive right to do which is by this Act conferred upon the owner of the copyright". We discuss the author's/owner's right into following:

4.3.2.1.2.1 ECONOMIC RIGHTS

In the case of a literary, dramatic or musical work, (except computer programme) the owner enjoys following economic rights—

(i) right to reproduce the work in any material form including the storing in any electronic medium;

(ii) right to issue copies, (except copies already in circulation);

(iii) right to perform or communicate to the public;

(iv) right to make any cinematograph film or sound recording;

(v) right to translation or adaptation or to do, in relation to a translation or an adaptation of the work, specified above [(i) to (vi)];

In the case of artistic work the owner enjoys in addition to the aforesaid right, depiction in three-dimensions of a two-dimensional work or two-dimensions of a three-dimensional work.[114]

In case of computer programme the owner enjoys right as describe above [(i) to (v)] and also right to sell or give on commercial rental or offer for sale or for commercial rental any copy of the computer programme: Provided that such commercial rental does not apply in respect of computer programmes where the programme itself is not the essential object of the rental.[115]

[112] Section 10 of Indian Copyright Act, 1957;
[113] Section 10 (2) of the Indian Copyright Act, "A Deputy Registrar of Copyrights shall discharge under the superintendence and direction of the Registrar of Copyrights such functions of the Registrar under this Act as the Registrar may, from time to time, assign to him; and any reference in this Act to the Registrar of Copyrights shall include a reference to a Deputy Registrar of Copyrights when so discharging any such functions."
[114] Subs. by Act 27 of 2012, s. 5(i), for sub-clause (i) (w.e.f. 21-6-2012). section 14(c) of Indian Copyright Act, 1957;
[115] Subs. by Act 49 of 1999, s. 3, for sub-clause (ii) (w.e.f. 15-1-2000); section 14(b) of Indian Copyright Act, 1957;

In the case of a cinematograph film the owner has right to make a copy of the film, including a photograph of any image forming part thereof, storing in any medium by electronic or other means, right to sell or give on commercial rental or offer for sale or for such rental, any copy of the film and communicate the film to the public.[116] In the case of sound recording the owner has similar right as in cinematographic films.[117]

In the case of resale for a price exceeding ten thousand rupees (before the expiration of term of copyright in the work), of the original copy of a painting, sculpture or drawing, or of the original manuscript of a literary or dramatic work or musical work, the author of such work if he was the first owner of rights notwithstanding any assignment of copyright in such work, have a right to share in the resale price of such original copy or manuscript.[118]

Thus we see that author has bundles of right in the same work. In his interest author (of existing work or prospective owner of the copyright in a future work) also transfer his right through assignment[119] or licence[120].

4.3.2.1.2.2 MORAL RIGHTS

Indian Copyright Law gives some special rights to the author of a work. Section 57 of said act reads as follows:

"(1) Independently of the author's copyright and even after the assignment either wholly or partially of the said copyright, the author of a work shall have the right— (a) to claim authorship of the work; and (b) to restrain or claim damages in respect of any distortion, mutilation, modification or other act in relation to the said work if such distortion, mutilation, modification or other act would be prejudicial to his honour or reputation: Provided that the author shall not have any right to restrain or claim damages in respect of any adaptation of a computer programme to which clause (aa) of sub-section (1) of section 52 applies[121]. Explanation.— Failure to display a work or to display it to the satisfaction of the author shall not be deemed to be an infringement of the rights conferred by this section.[122]

(2) The right conferred upon an author of a work by sub-section (1) may be exercised by the legal representatives of the author."

Thus above special provisions of section 30 of said act intact the right of integrity as well as the right of paternity of author and thus save the honour of author even after his death. It is

[116] section 14(d) of Indian Copyright Act, 1957;
[117] section 14(e) of Indian Copyright Act, 1957;
[118] section 51A of Indian Copyright Act, 1957;
[119] section 18 of Indian Copyright Act, 1957;
[120] section 30 of Indian Copyright Act, 1957;
[121] According to said clause, the making of copies or adaptation of a computer programme by the lawful possessor of a copy of such computer programme shall not come under purview of provisions of section 57 of Indian copyright law.
[122] Subs. by Act 38 of 1994, s. 20, for sub-section (1) (w.e.f. 10-5-1995)

noteworthy to mention here that failure to display a work or to display it to the satisfaction of the author shall not be deemed to be an infringement of the rights conferred by this section.

In the case of *Smt. Manu Bhandari Vs Kala Vikash Pictures Ltd.*[123] it was observed, in respect of Section 57 of the Copyright Act 1957: "Section 57 is a special provision for the protection of author's moral rights. The object of it is to put the Copyright on a higher footing than normal matters of right, the language of Section 57 is of widest amplitude. It cannot be restricted to literary expressions only. Audiovisual manifestations are also directly covered under it".

4.3.2.1.3 COMMUNICATION TO THE PUBLIC

According to the clause (a) (ii) of section 51 of Indian Copyright law: "permits for profit any place to be used for the communication of the work to the public where such communication constitutes an infringement of the copyright in the work, unless he was not aware and had no reasonable ground for believing that such communication to the public would be an infringement of copyright;"

Communication to the public means[124]: "making any work or performance available for being seen or heard or otherwise enjoyed by the public directly or by any means of display or diffusion other than by issuing physical copies of it, whether simultaneously or at places and times chosen individually, regardless of whether any member of the public actually sees, hears or otherwise enjoys the work or performance so made available. Explanation.— For the purposes of this clause, communication through satellite or cable or any other means of simultaneous communication to more than one household or place of residence including residential rooms of any hotel or hostel shall be deemed to be communication to the public;"

For the purpose of this clause, if any person without the prior permission of author or owner of a work, makes profit through any of the following act, shall consider an infringement of copyright:

- Show drama or play based on that work;
- Telling stories on radio or television related to that work;
- Made work available to the public on internet or any social media (which is profit earning platform, such as YouTube);
- Making film based on that work;
- Telecast such drama, play, film, song, pictures, sound recording of copyrighted work to the large public through satellite, cable, internet, radio or similar means or one private place;
- Show any photograph to the public directly or indirectly;
- Issuing copies of that work to the public in the form of book, disk or by means of any other technology'

[123] AIR 1987 DEL 13(17);
[124] Section 2 (ff) of Indian Copyright Act, 1957;

- The performance of work during religious or official ceremony;
- Any other act through which the work made available to one person or thousands of person

If any person does any of the aforesaid act and by chance no one see, hear or otherwise enjoys the work or performance, it does not means that the person is innocent. Regardless of this fact, it constitutes the communication of work to the public and his act constitutes an infringement of the copyright, unless he was not aware and had no reasonable ground for believing that such communication to the public would be an infringement of copyright. For example, a cable operator may transmit a cinematograph film which no member of the public may see. Still it is a communication to the public.

4.3.2.1.4 INFRINGING COPYRIGHT BY MAKING SALE, HIRE AND TRADE OF A COPYRIGHTED WORK

Clause (b) of section 51 of Indian Copyright Act, 1957 reads as:

when any person—

(i) makes for sale or hire, or sells or lets for hire, or by way of trade displays or offers for sale or hire, or

(ii) distributes either for the purpose of trade or to such an extent as to affect prejudicially the owner of the copyright, or

(iii) by way of trade exhibits in public;

From the above interpretation it is clear that, publication of copyrighted work, reproduction of such work in material form, adaptation or translation of such work is constitute infringement of copyright.

In the case of **literary works**, illegal reproduction of books and other printed materials and distribution/selling of these for profit is called piracy and amount to infringement of copyright. Infringement is commonly found to foreign and good indigenous books, generally in the field of medical, engineering and other professional books, encyclopedia and popular fictions and sold with other non-pirated version of books by usual retailers identified by the pirates. This type of piracy is seasonal in nature and the whole process of printing with selling gets over within one of two month generally. Sometimes even some renowned publishers involve themselves in piracy by way of selling books beyond the contract period. These publisher buys reprint rights from some foreign publishers and keeps on selling books even after the expiry of the period mentioned in the agreement in the name of clearing old stock. Many foreign publishers send books for review. The pirates get access to such books and make quick prints to sell in market. Piracy in the form of mass photocopying of books is largely prevalent in India, Students borrow books from libraries and then get these photocopied from the photocopier kept at the institution where from the books are borrowed. While copyright

law permits photocopying of literary works for limited private uses such as research, review or criticism but in most of the cases the entire book is photocopied including the cover pages. In this process student community and the photocopy operators gain but the publishers lose huge revenue.

In the case of **sound recording** without the knowledge of the performers, composer or the recording company songs from different legitimate cassettes/CDs are copied. These are then packaged to look different and sold in the market. There may be counterfeiting of original copies. Thus misleading the buyers. The third form of music piracy is bootlegging, where unauthorized recordings of performance by artists are made and subsequently reproduced and sold in the market. According to a survey conducted jointly by Business Software Alliance (BSA) and NASSCOM in May 2006. India is the world's sixth largest pirate market in value terms but third in volume terms.

Infringement of copyright of cinematographic works takes two principal forms, namely 'video piracy' and 'cable piracy'. Today internet becomes the main platform of film piracy. Within 24 to 36 hours of releasing a cinematographic film pirated version is available on the internet.

4.3.2.1.5 SPECIAL PROVISIONS REGARDING TO THE SOUND RECORDIND AND VIDEO FILMS

A new clause, section 52 A was inserted to the Indian Copyright Act, 1957 by the 1984 Amendment Act.[125]

52A. Particulars to be included in [sound recording][126] and video films.—

(1) No person shall publish a [sound recording][127] in respect of any work unless the following particulars are displayed on the [sound recording][128] and on any container thereof, namely:—

(a) the name and address of the person who has made the sound recording;

(b) the name and address of the owner of the copyright in such work; and

(c) the year of its first publication.

(2) No person shall publish a video film in respect of any work unless the following particulars are displayed in the video film, when exhibited, and on the video cassette or other container thereof, namely:—

[125] Ins. by Act 65 of 1984, s. 4 (w.e.f. 8-10-1984).
[126] Subs. by Act 38 of 1994, s. 2, for "record" (w.e.f. 10-5-1995).
[127] Ibid
[128] Ibid

(a) if such work is a cinematograph film required to be certified for exhibition under the provisions of the Cinematograph Act, 1952 (37 of 1952), a copy of the certificate granted by the Board of Film Certification under section 5A of that Act in respect of such work;

(b) the name and address of the person who has made the video film and a declaration by him that he has obtained the necessary licence or consent from the owner of the copyright in such work for making such video film; and

(c) the name and address of the owner for the copyright in such work.

Sound recording and video films are highly susceptible to piracy due to its nature. Hence separate section 52 A was inserted to the copyright act to protect them. It has made mandatory to gives following particulars with any sound recording, when displayed on any audio cassettes or any other container:

- name and address of the maker of sound recording;
- name and the address of the owner of that work (sound recording);
- the year in which that work first published.

Similarly, following particulars must be displayed on any video film, when exhibits on any video cassettes or any other container:

- in case of cinematographic film, a copy of the certificate granted by the Board of Film Certification;
- name and address of the maker of video film and details of licence and consent;
- name and address of owner of such work.

Above provisions help in the prevention of piracy in this computer age.

4.3.2.1.6 IMPORTATION OF INFRINGING COPIES INTO INDIA

Clause (iv) of section 51 (2) of Indian Copyright Act says, "imports into India, any infringing copies of the work, shall constitute infringement of copyright." (Provided that nothing in sub-clause (iv) shall apply to the import of one copy of any work for the private and domestic use of the importer.)[129]

Section 51 of said act further explain that, the reproduction of a literary, dramatic, musical or artistic work in the form of a cinematograph film shall be deemed to be an "infringing copy".[130] The interpretation of "infringing copy' according to the section 2 (m)[131] is as follows-

"infringing copy" means—

(i) in relation to a literary, dramatic, musical or artistic work, a reproduction thereof otherwise than in the form of a cinematographic film;

(ii) in relation to a cinematographic film, a copy of the film made on any medium by any means;

[129] Subs. by Act 38 of 1994, s. 16, for the proviso (w.e.f. 10-5-1995)
[130] Explanation – section 51 of Indian Copyright Act, 1957;
[131] Indian Copyright Act, 1957;

(iii) in relation to a sound recording, any other recording embodying the same sound recording, made by any means;

(iv) in relation to a programme or performance in which such a broadcast reproduction right or a performer's right subsists under the provisions of this Act, the sound recording or a cinematographic film of such programme or performance,

if such reproduction, copy or sound recording is made or imported in contravention of the provisions of this Act;

Thus, Infringement of a copyright is a trespass on a private domain owned and occupied by the owner of the copyright and any act in contravention of anything the sole right to do which is conferred by the statute on the owner of the copyright.[132]

4.3.3 CERTAIN ACTS NOT TO BE INFRINGEMENT OF COPYRIGHT

There is other face of coin also. To established balance between rights of creator and interest of society, there are some exceptions in the copyright law, which cater the need of society. Section 52 of Indian copyright Act lays down the provisions in this regards:

(1) The following acts shall not constitute an infringement of copyright, namely,—

(a) a fair dealing with any work (except computer programme) for the purposes of private or personal use, including research, criticism or review and the reporting of current events and current affairs, including the reporting of a lecture delivered in public.

Explanation.— The storing of any work in any electronic medium for the purposes mentioned in this clause, including the incidental storage of any computer programme which is not itself an infringing copy for the said purposes, shall not constitute infringement of copyright.

(aa) the making of copies or adaptation of a computer programme by the lawful possessor of a copy of such computer programme, from such copy in order to utilise the computer programme for the purpose for which it was supplied; or to make back-up copies purely as a temporary protection against loss, destruction or damage;

(ab) the doing of any act necessary to obtain information essential for operating inter-operability of an independently created computer programme with other programmes by a lawful possessor of a computer programme provided that such information is not otherwise readily available;

(ac) the observation, study or test of functioning of the computer programme in order to determine the ideas and principles which underline any elements of the programme while performing such acts necessary for the functions for which the computer programme was supplied;

[132] Justice S. Murtaza Fazal Ali in the case of *R.* G. *Anand Vs Delux Film,* AIR 1978 SC 1613.

(ad) the making of copies or adaptation of the computer programme from a personally legally obtained copy for non-commercial personal use;

(b) the transient or incidental storage of a work or performance purely in the technical process of electronic transmission or communication to the public;

(c) transient or incidental storage of a work or performance for the purpose of providing electronic links, access or integration, where such links, access or integration has not been expressly prohibited by the right holder, unless the person responsible is aware or has reasonable grounds for believing that such storage is of an infringing copy: Provided that if such person has received a written complaint from the owner of copyright in the work, complaining that such transient or incidental storage is an infringement, such person responsible for the storage shall refrain from facilitating such access for a period of twenty-one days or till he receives an order from the competent court refraining from facilitation access and in case no such order is received before the expiry of such period of twenty-one days, he may continue to provide the facility of such access;

(d) the reproduction of any work for the purpose of a judicial proceeding or report of a judicial proceeding;

(e) the reproduction or publication of any work prepared by the Secretariat of a Legislature exclusively for the use of the members of that Legislature;

(f) the reproduction of any work in a certified copy made or supplied in accordance with any law for the time being in force;

(g) the reading or recitation in public of reasonable extracts from a published literacy or dramatic work;

(h) the publication in a collection, mainly composed of non-copyright matter, bona fide intended for instructional use, and so described in the title and in any advertisement issued by or on behalf of the publisher, of short passages from published literary or dramatic works, not themselves published for such use in which copyright subsists: Provided that not more than two such passages from works by the same author are published by the same publisher during any period of five years.

Explanation.— In the case of a work of joint authorship, references in this clause to passages from works shall include references to passages from works by any one or more of the authors of those passages or by any one or more of those authors in collaboration with any other person;

(i) the reproduction of any work by a teacher or a pupil in the course of instruction or as part of the question to be answered in an examination or in answers to such questions;

(j) the performance, in the course of the activities of an educational institution, of a literary, dramatic or musical work by the staff and students of the institution, or of a cinematograph

film or a sound recording. However the audience is limited to staff and students, the parents and guardians etc.

(k) the causing of a recording to be heard in public by utilising it in an enclosed room or hall meant for the common use of residents in any residential premises (not being a hotel or similar commercial establishment) or as part of the activities of a club or similar organisation which is not established or conducted for profit;

(l) the performance of a literary, dramatic or musical work by an amateur club or society, if the performance is given to a non-paying audience, or for the benefit of a religious institution;

(m) the reproduction in a newspaper, magazine or other periodical of an article on current economic, political, social or religious topics, unless the author of such article has expressly reserved to himself the right of such reproduction;

(n) the storing of a work in any medium by electronic means by a non-commercial public library, for preservation if the library already possesses a non-digital copy of the work;

(o) the making of not more than three copies of a book (including a pamphlet, sheet of music, map, chart or plan) by or under the direction of the person in charge of a non-commercial public library for the use of the library if such book is not available for sale in India;

(p) the reproduction, for the purpose of research or private study or publication of an unpublished literary, dramatic or musical work kept in a library, museum or other institution to which the public has access: Provided that where the identity of the author of any such work or, in the case of a work of joint authorship, of any of the authors is known to the library, museum or other institution, the provisions of this clause shall apply only if such reproduction is made at a time more than sixty years from the date of the death of the author.

(q) the reproduction or publication of any matter published in any Official Gazette (except an Act of a Legislature), any Act of a Legislature subject to the condition that such Act is reproduced or published together with any commentary thereon or any other original matter, the report of any committee, commission, council, board or other like body appointed by the Government if such report has been laid on the Table of the Legislature, unless the reproduction or publication of such report is prohibited by the Government, any judgment or order of a court, tribunal or other judicial authority, unless the reproduction or publication of such judgment or order is prohibited by the court, the tribunal or other judicial authority do not amount an infringement of copyright.

(r) the production or publication of a translation in any Indian language of an Act of a Legislature and of any rules or orders made thereunder, if no translation of such Act or rules or orders in that language has been previously been produced or published by the Government or where a translation of such Act or rules or orders in that language has been produced or published by the Government, if the translation is not available for sale to the public: Provided

that such translation contains a statement at a prominent place to the effect that the translation has not been authorised or accepted as authentic by the Government;

(s) the making or publishing of a painting, drawing, engraving or photograph of a work of architecture or the display of a work of architecture;

(t) the making or publishing of a painting, drawing, engraving or photograph of a sculpture, or other artistic work falling under sub-clause (iii) of clause (c) of section 2[133], if such work is permanently situate in a public place or any premises to which the public has access;

(u) the inclusion in a cinematograph film of any artistic work permanently situate in a public place or any premises or any other artistic work, if such inclusion is only by way of background or is otherwise incidental to the principal matters represented in the film;

(v) the use by the author of an artistic work, where the author of such work is not the owner of the copyright therein, of any mould, cast, sketch, plan, model or study made by him for the purpose of the work. However he cannot repeat or imitate the main design of the work.

(w) the making of a three-dimensional object from a two-dimensional artistic work, such as a technical drawing, for the purposes of industrial application of any purely functional part of a useful device;

(x) the reconstruction of a building or structure in accordance with the architectural drawings or plans by reference to which the building or structure was originally constructed: Provided that the original construction was made with the consent or licence of the owner of the copyright in such drawings and plans;

(y) in relation to a literary, dramatic, artistic or musical work recorded or reproduced in any cinematograph film, the exhibition of such film after the expiration of the term of copyright therein;

(z) the making of an ephemeral recording, by a broadcasting organisation using its own facilities for its own broadcast by a broadcasting organisation of a work which it has the right to broadcast; and the retention of such recording for archival purposes on the ground of its exceptional documentary character;

(za) the performance of a literary, dramatic or musical work or the communication to the public of such work or of a sound recording in the course of any bona fide religious ceremony or an official ceremony held by the Central Government or the State Government or any local authority;

[133] Any other work of artistic craftsmanship (come under the meaning of 'artistic work'); section 2 (c)(iii) of Indian Copyright Act;

(zb) the adaptation, reproduction, issue of copies or communication to the public of any work in any accessible format, by— (i) any person to facilitate persons with disability to access to works including sharing with any person with disability of such accessible format for private or personal use, educational purpose or research; or (ii) any organisation working for the benefit of the persons with disabilities in case the normal format prevents the enjoyment of such works by such persons: Provided that the copies of the works in such accessible format are made available to the persons with disabilities on a non-profit basis but to recover only the cost of production: Provided further that the organisation shall ensure that the copies of works in such accessible format are used only by persons with disabilities and takes reasonable steps to prevent its entry into ordinary channels of business.

Explanation.— For the purposes of this sub-clause, "any organisation" includes an organisation registered under section 12A of the Income-tax Act, 1961 (43 of 1961) and working for the benefit of persons with disability or recognised under Chapter X of the Persons with Disabilities (Equal Opportunities, Protection of Rights and full Participation) Act, 1995 (1 of 1996) or receiving grants from the Government for facilitating access to persons with disabilities or an educational institution or library or archives recognised by the Government;

(zc) the importation of copies of any literary or artistic work, such as labels, company logos or promotional or explanatory material, that is purely incidental to other goods or products being imported lawfully.

(2) The provisions of sub-section (1) shall apply to the doing of any act in relation to the translation of a literary, dramatic or musical work or the adaptation of a literary, dramatic, musical or artistic work as they apply in relation to the work itself.

All the above acts do not constitute infringement of copyright.

4.3.4 REMEDIES FOR INFRINGEMENT

For every right, there is remedy under law. The owner of copyright can sue others for infringement of his copyright. The Indian Copyright Act, 1957 provides civil remedies, criminal remedies and administrative remedies for violation of copyright. Following persons can file a case for the infringement of their copyrights[134]-

(i) Author and owner of the copyright
(ii) Owner and co-owner of the copyright
(iii) Assignee of the copyright
(iv) Translator of the work
(v) Licensor or licensee of the work
(vi) Any person who incur damage due to infringed work
(vii) The person who has interest in ceased copies/work or plates

Following persons can be party in the proceedings:[135]

[134] Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications.
[135] Ibid

(i) Infringer of copyright
(ii) Assigner or assignee of the copyright
(iii) The person lay hold of infringing copies or plates
(iv) The person who business the infringing copies or plates
(v) The person who contravene the provisions of section 52 A[136]
(vi) The company related to infringement
(vii) The person giving false evidence

It is noteworthy to mention here that in some circumstances the an owner of copyright can be party of proceedings. Related provisions are given in section 61 of Indian copyright act. Section 61 says:

Owner of copyright to be party to the proceeding— (1) In every civil suit or other proceeding regarding infringement of copyright instituted by an exclusive licensee, the owner of the copyright shall, unless the court otherwise directs, be made a defendant and where such owner is made a defendant, he shall have the right to dispute the claim of the exclusive licensee.

(2) Where any civil suit or other proceeding regarding infringement of copyright instituted by an exclusive licensee is successful, no fresh suit or other proceeding in respect of the same cause of action shall lie at the instance of the owner of the copyright.

Thus where a suit is instituted by the exclusive licensee the owner of the copyright shall be party of the proceedings. And when a judgement in a suit instituted by exclusive licensee is in his favour, then owner of copyright shall have no right to file new suit or other proceeding in respect of same cause of action.

4.3.4.1 CIVIL REMEDIES

Chapter XII of the Indian Copyright Act deals with the civil remedies against the infringement of copyright. A copyright owner can take legal action against any person who infringes the copyright in the work. The copyright owner is entitled to remedies by way of injunctions, damages and accounts.[137] Civil remedies may be preventive or compensative.

4.3.4.1.1 JURISDICTION OF COURT

Every suit or other civil proceeding arising under the Chapter XII in respect of the infringement of copyright in any work or the infringement of any other right conferred by this Act shall be instituted in the district court having jurisdiction.[138] For this purpose o, a "district court having jurisdiction" shall, notwithstanding anything contained in the Code of Civil Procedure, 1908 (5 of 1908), or any other law for the time being in force, include a district court within the local limits of whose jurisdiction, at the time of the institution of the suit or other proceeding, the person instituting the suit or other proceeding or, where there are more than one such persons,

[136] See 4.3.2.1.5
[137] Section 55 (1) of the Indian Copyright Act, 1957
[138] Section 62 (1) of the Indian Copyright Act, 1957

any of them actually and voluntarily resides or carries on business or personally works for gain.[139]

4.3.4.1.2 DEFINITION OF OWNER OF COPYRIGHT

Section 54 under chapter XII of the Indian Copyright Act clear the definition of 'Owner of copyright', who can sue others for infringement of his copyright. Section 54 of said act reads as:

For the purposes of this Chapter, unless the context otherwise requires, the expression "owner of copyright" shall include—

(a) an exclusive licensee;

(b) in the case of an anonymous or pseudonymous literary, dramatic, musical or artistic work, the publisher of the work, until the identity of the author or, in the case of an anonymous work of joint authorship, or a work of joint authorship published under names all of which are pseudonyms, the identity of any of the authors, is disclosed publicly by the author and the publisher or is otherwise established to the satisfaction of the 1 [Appellate Board] by that author or his legal representatives.

4.3.4.1.3 PRESUMPTION OF AUTHOR OR PUBLISHER OF THE WORK

Section 55 (2) of the Indian Copyright Act provided that, in the case of infringement related to the literary, dramatic, musical or artistic work unless there are contrary evidences before the court, the name of author or publisher appear on the work, be presumed as original by the court.

The said section reads as follows:

"Where, in the case of a literary, dramatic, musical or artistic work, or, subject to the provisions of sub-section (3) of section 13[140], a cinematograph film or sound recording, a name purporting to be that of the author, or the publisher, as the case may be, of that work, appears on copies of the work as published, or, in the case of an artistic work, appeared on the work when it was made, the person whose name so appears or appeared shall, in any proceeding in respect of infringement of copyright in such work, be presumed, unless the contrary is proved, to be the author or the publisher of the work, as the case may be."

4.3.4.1.4 ANTON PILLAR ORDER

[139] Section 62 (2) of the Indian Copyright Act, 1957; for detail see Unit-3 JURISDICTION ISSUES AND COPYRIGHT under the heading- JURISDICTION AND INDIAN COPYRIGHT ACT

[140] 13 (3) Copyright shall not subsist— (a) in any cinematograph film if a substantial part of the film is an infringement of the copyright in any other work; (b) in any 1 [sound recording] made in respect of a literary, dramatic or musical work, if in making the sound recording, copyright in such work has been infringed.

It is a preventive relief. It was invented and used for the first time by English exponent, Lord Denning in *Anton Pillar K. G. Vs Manufacturing Process Limited.*[141] It is named after the plaintiff in the case. Presently, it has got recognition in the provision of TRIPs also.[142] Anton pillar order is like an ex-parte interlocutory order. Which allow to inspect defendant's premises. However it is an equitable relief and granted only in rare cases. The necessity of this order arises, where there is a grave danger of destroying relevant infringing documents and articles by the defendant, so that the justice will be effected or may be defeated.[143] It is not a search warrant. It only authorise entry and inspection of the defendant, by permission, in the absence of which the act would tantamount to the tort of trespass. [144]

4.3.4.1.5 INJUNCTION AGAINST INFRINGEMENT OF COPYRIGHT

An injunction is an equitable remedy in the form of a court order that compels a party to do or refrain from specific acts. It is the main remedy sought in most copyright suits is an injunction to restrain the defendant from continuing to do acts which constitute infringement.[145] It is an interim relief granted during the pendency of the proceedings. The injunctions can be temporary and permanent which may depend upon the situation and circumstances of the case. In the case of *Ratna sagar (pvt.) Ltd. Vs Trisia Publication and Others*[146] the court passes the permanent injunction.

In the case where the defendant proves that at the date of the infringement he was not aware and had no reasonable ground for believing that copyright subsisted in the work, the plaintiff shall entitled to an injunction in respect of the infringement.[147]

4.3.4.1.6 COMPENSATORY CIVIL REMEDIES

These are curative in nature and providing/compensate the owner or the creator of the work to save him from pecuniary/economic loss which may arises due to the act of infringement. Compensatory remedies includes Damages, Accounts of Profit and possession/delivery of infringing copies.

The Copyright owner can either claim for damages or accounts of profit and not both since the spirit behind this legal remedy is that the plaintiff must be compensated and he cannot be compensated twice for the same violated act. if the defendant had reasonable ground for believing that copyright is not subsisted in the work, the plaintiff shall entitled for an injunction with a decree for the whole or part of the profits made by the defendant by the sale of the infringing copies as the court may in the circumstances deem reasonable.[148] Further the costs

[141] (1976) Ch. 5 (Known as Anton Piller Order), referred by Dr. J.K. Das, Intellectual Property Rights, 1st ed., Kamal Law House, Kolkata, 2008, p.212.
[142] TRIPS Agreement, Para 2 of Article 50
[143] Intellectual property rights and the law by Dr. G.B. Reddy; Gogia law agency, Hyderabad; p.159
[144] Prof. A.K. Kaul, Dr. V.K. Ahuja, Law of Copyright: From Gutenburg's Invention to Internet; Faculty of Law, University if Delhi, 2001, p. 16-17
[145] Section 55 (1) of the Indian Copyright Act, 1957
[146] 1996 P.T.C. (16) 597.
[147] Section 55 (1) of the Indian Copyright Act, 1957

[148] Ibid

of all parties in any proceedings in respect of the infringement of copyright shall be in the discretion of the court.[149]

Rights of owner against persons possessing or dealing with infringing copies.— All infringing copies of any work in which copyright subsists, and all plates used or intended to be used for the production of such infringing copies, shall be deemed to be the property of the owner of the copyright, who accordingly may take proceedings for the recovery of possession thereof or in respect of the conversion thereof: Provided that the owner of the copyright shall not be entitled to any remedy in respect of the conversion of any infringing copies, if the opponent proves— (a) that he was not aware and had no reasonable ground to believe that copyright subsisted in the work of which such copies are alleged to be infringing copies; or (b) that he had reasonable grounds for believing that such copies or plates do not involve infringement of the copyright in any work.[150]

Thus all copies of the work in which copyright subsists are the property of the owner of that work. He has right to take possession of all unsold infringing copies and the price of all already sold copies.[151]

4.3.4.1.7 PROTECTION OF SEPARATE RIGHTS

In the case, where the several rights comprising the copyright in any work, which are owned by different persons, the owner of any such right shall, to the extent of that right, be entitled to the remedies provided by this Act and may individually enforce such right by means of any suit, action or other proceeding without making the owner of any other right a party to such suit, action or proceeding.[152]

4.3.4.1.8 REMEDY IN THE CASE OF GROUNDLESS THREAT OF LEGAL PROCEEDINGS

According to the Section 60 of the Indian copyright Act, 1957, Where any person claiming to be the owner of copyright in any work, threatens any other person by circulars, advertisements or otherwise, with any legal proceedings or liability in respect of an alleged infringement of the copyright, any person aggrieved thereby may, [notwithstanding anything contained in section 34 of the Specific Relief Act, 1963 (47 of 1963)], institute a declaratory suit that the alleged infringement to which the threats related was not in fact an infringement of any legal rights of the person making such threats and he is entitled to—

(a) obtain an injunction against the continuance of such threats; and

(b) recover such damages, if any, as he has sustained by reason of such threats

[149] Section 55 (3) of the Indian Copyright Act, 1957
[150] Section 58 of the Indian Copyright Act, 1957
[151] See *Gopaldas vs Jagannath Prasad*, AIR 1938 ALL. 266 at p. 271; Intellectual property rights and the law by Dr. G.B. Reddy; Gogia law agency, Hyderabad; p.162
[152] Section 56 of the Indian Copyright Act, 1957

Provided that this section shall not apply if the person making such threats, with due diligence, commences and prosecutes an action for infringement of the copyright claimed by him.

4.3.4.1.9 CIVIL REMEDIES ARE NOT AVAILABLE IN THE CASE OF WORKS OF ARCHITECTURE

Where the construction of a building or other structure which infringes or which, if completed, would infringe the copyright in some other work has been commenced, the owner of the copyright shall not be entitled to obtain an injunction to restrain the construction of such building or structure or to order its demolition. The provisions of Specific Relief Act, 1963 (47 of 1963) are not applicable in the case of infringing architecture work.[153] Hence Section 58 shall not apply in respect of the construction of a building or other structure which infringes or which, if completed, would infringe the copyright in some other work.[154]

4.3.4.2 CRIMINAL REMEDIES

CHAPTER XIII of Indian Copyright Act deals with the offences regarding the infringement of copyright. Section 63 to 70 lays down the provisions in this regards.

Section 70 of copyright act clear about the power of court to takes cognizance of offences under the act. According to this section— 'No Court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence under this Act."

Hence the power to takes cognigence of offences under this act are conferred on the Metropolitan Magistrate or first class Judicial Magistrate.

4.3.4.2.1 OFFENCE OF INFRINGEMENT OF COPYRIGHT OR OTHER RIGHTS- SECTION 63

Any person who knowingly infringes or abets the infringement of—

(a) the copyright in a work, or

(b) any other right conferred by this Act except the right conferred by section 53A, shall be punishable with imprisonment for a term which shall not be less than six months but which may extend to three years and with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees.

Thus any person who knowingly infringing or abetting the infringement of copyright in any work or any other right conferred by the copyright act, will be punishable with six month to three years with fine of fifty thousand to two lakh rupees.

Where the infringement has not been made for gain in the course of trade or business the court may, for adequate and special reasons to be mentioned in the judgment, impose a sentence of imprisonment for a term of less than six months or a fine of less than fifty thousand rupees.

[153] Section 59 (1) of the Indian Copyright Act, 1957
[154] Section 59 (2) of the Indian Copyright Act, 1957

It is also noted that, construction of a building or other structure which infringes or which, if completed, would infringe the copyright in some other work shall not be an offence under this section.

Again if a person already been convicted of an offence described above is again convicted of any such offence shall be punishable for the second and for every subsequent offence, with imprisonment for a term which shall not be less than one year but which may extend to three years and with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees.[155]

Provided that where the infringement has not been made for gain in the course of trade or business the court may, for adequate and special reasons to be mentioned in the judgment, impose a sentence of imprisonment for a term of less than one year or a fine of less than one lakh rupees: Provided further that for the purposes of this section, no cognizance shall be taken of any conviction made before the commencement of the Copyright (Amendment) Act, 1984 (65 of 1984).[156]

It is noteworthy to mention here that the suit under section 63, instituted only by the owner of the work or assignee/licensee.[157]

It is also not necessary for prosecution under section 63, that work should registered under copyright act.[158]

4.3.4.2.2 KNOWINGLY USING OF INFRINGING COPIES OF COMPUTER PROGRAMME

Section 63B of Indian Copyright Act says that, knowing use of infringing copy of computer programme to be an offence. Section 63b reads as follows:

"Any person who knowingly makes use on a computer of an infringing copy of a computer programme shall be punishable with imprisonment for a term which shall not be less than seven days but which may extend to three years and with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees:

Provided that where the computer programme has not been used for gain or in the course of trade or business, the Court may, for adequate and special reasons to be mentioned in the judgment, not impose any sentence of imprisonment and may impose a fine which may extend to fifty thousand rupees."

Thus the punishment in case of knowing use of infringing copy of computer programme will be seven days to three years with fine of 50 thousand to two lakh rupees. In the case where

[155] Section 63 A of the Indian Copyright Act, 1957
[156] Ibid.
[157] *Naveen Chandra Jain vs state of U.P.*, 1981 All law J. 1273; Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications. P. 168
[158] *K.C. Bokadia vs Dinesh Chandra Dube*, (1999) M.P.L.J. 33; Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications. P. 168

computer programme is used for not any profit or in the course of trade or business the court may imposes only fine up to 50 thousand rupees without any imprisonment.

4.3.4.2.3 POSSESSION OF PLATES USED FOR MAKING INFRINGING COPIES

According to the section 65 of the Indian copyright Act, possession of plates for purpose of making infringing copies is an offence and punishment for this offence will be imprisonment up to two years with a fine, which is on the discretion of the court. Section 65 of said act reads as follows—

'Any person who knowingly makes, or has in his possession, any plate for the purpose of making infringing copies of any work in which copyright subsists shall be punishable with imprisonment which may extend to two years and shall also be liable to fine."

Further section 66 provides the disposal of infringing copies or plates for purpose of making infringing copies. According to this section— 'The Court trying any offence under this Act may, whether the alleged offender is convicted or not, order that all copies of the work or all plates in the possession of the alleged offender, which appear to it to be infringing copies, or plates for the purpose of making infringing copies, be delivered up to the owner of the copyright or may make such order as it may deem fit regarding the disposal of such copies or plates.

Thus in the above case the court may order to delivered such infringing copies, or plates for the purpose of making infringing copies to the owner of the copyright.

Appeals against orders of Magistrate under section 66— Any person aggrieved by an order made under section 66 may, within thirty days of the date of such order, appeal to the Court to which appeals from the court making the order ordinarily lie, and such appellate court may direct that execution of the order be stayed pending disposal of the appeal.[159]

4.3.4.2.4 MAKING FALSE ENTRIES IN REGISTER, ETC., FOR PRODUCING OR TENDERING FALSE ENTRIES

Section 67 of the said act provided provisions for penalty for making false entries in register, etc., for producing or tendering false entries. According to section 67—

"Any person who,—

(a) makes or causes to be made a false entry in the Register of Copyrights kept under this Act, or

(b) makes or causes to be made a writing falsely purporting to be a copy of any entry in such register, or (c) produces or tenders or causes to be produced or tendered as evidence any such entry or writing, knowing the same to be false, shall be punishable with imprisonment which may extend to one year, or with fine, or with both.

Thus the penalty under this section will be imprisonment up to one year or fine or both.

[159] Section 71 of the Indian copyright Act, 1957

4.3.4.2.5 MAKING FALSE STATEMENTS FOR THE PURPOSE OF DECEIVING OR INFLUENCING ANY AUTHORITY OR OFFICER

Section 68 of Indian Copyright Act gives the provisions for penalty for making false statements for the purpose of deceiving or influencing any authority or officer. Section 68 reads as follows—

"Any person who,—

(a) with a view to deceiving any authority or officer in the execution of the provisions of this Act, or

(b) with a view to procuring or influencing the doing or omission of anything in relation to this Act or any matter thereunder, makes a false statement or representation knowing the same to be false, shall be punishable with imprisonment which may extend to one year, or with fine, or with both.

Hence the punishment under section 68 is also imprisonment up to one year or fine or both.

4.3.4.2.6 CONTRAVENTION OF SECTION 52A

Section 52A makes the special provisions about particulars to be included in 3 sound recording and video films in the case of publishing them.[160] Section 68A makes provisions for penalty for contravention of provisions of section 52A. According to this section—

"Any person who publishes a sound recording or a video film in contravention of the provisions of section 52A shall be punishable with imprisonment which may extend to three years and shall also be liable to fine."

Since sound recording and video films are highly susceptible to piracy due to its nature. Hence separate section 52 A was inserted to the copyright act to protect them. Contravention of this will be punishable with imprisonment up to three years or fine or with both.

4.3.4.2.7 OFFENCES BY COMPANIES

In the case where any company i.e. anybody corporate and including a firm or other association of persons[161] commits any offence under this act, section 69 gives provisions in this regards. Section 69 says—

(1) Where any offence under this Act has been committed by a company, every person who at the time the offence was committed was in charge of, and was responsible to the company for, the conduct of the business of the company, as well as the company shall be deemed to be guilty of such offence and shall be liable to be proceeded against and punished accordingly:

[160] See 4.3.2.1.5 SPECIAL PROVISIONS REGARDING TO THE SOUND RECORDIND AND VIDEO FILMS

[161] Explanation of section 69 of the Indian copyright Act, 1957

Provided that nothing contained in this sub-section shall render any person liable to any punishment, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company, and it is proved that the offence was committed with the consent or connivance of, or is attributable to any negligence on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Here "director", in relation to a firm means a partner in the firm.[162]

Thus any offence committed by a company in the contravention of the provisions of Indian Copyright Act, following can be punishable:

1. The person who is in-charge for conducting the business of company
2. The company
3. The director
4. The manager
5. The secretary
6. Other officers

With the consent or connivance of, or is attributable to any negligence on the part of whom the offence was committed.

It is also noteworthy to mention here that 'firm' is also included under word 'company'.[163]

4.3.4.2.8 PROTECTION OF TECHNOLOGICAL MEASURES AND PROTECTION OF RIGHTS MANAGEMENT INFORMATION

Two new sections- 65A and 65B has been introduced to the Indian Copyright Act through the Copyright (Amendment) Act, 2012, which provided protection for technological measures and protection for right management information.[164]

TPMs are technological safeguards which are put in place which prevents the copying of a protected work in digital format to be copied multiple times. RMI are generally put on the protected work to ensure that the label of the owner of the work is always embedded in the work.[165]

[162] Ibid

[163] *Monaben Ketanbhai Shah and others vs state of Gujrat and others*, (2004) 7 S.S.C. 15; Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications. P. 173

[164] For details see 2.3.6 PROTECTION AGAINST INTERNET PIRACY; UNIT 2- COPYRIGHT IN INTERNET

[165] For detail see 2.3.3.2 Technological Protection Measures and Rights Management Information (TPMs/RMI); UNIT 2- COPYRIGHT IN INTERNET

4.3.4.2.9 POWER OF POLICE TO SIEZE INFRINGING COPIES, UNDER OFFENCE OF SECTION 63

Section 64 gives power to police to seize infringing copies. The provision of said section is reads as follows:

"(1) Any police officer, not below the rank of a sub inspector, may, if he is satisfied that an offence under section 63 in respect of the infringement of copyright in any work has been, is being, or is likely to be, committed, seize without warrant,all copies of the work, and all plates used for the purposes of making infringing copies of the work, wherever found, and all copies and plates so seized shall, as soon as practicable be produced before a Magistrate.

(2) Any person having an interest in any copies of a work, or plates seized under sub-section (1) may, within fifteen days of such seizure, make an application to the Magistrate for such copies, or plates being restored to him and the Magistrate, after hearing the applicant and the complainant and making such further inquiry as may be necessary, shall make such order on the application as he may deem fit.

Thus above provisions of Indian Copyright Act gives the power to police officer not below the rank of sub inspector can seize without warrant all infringing copies of the work and all plates used for the purposes of making infringing copies of the work. Hence stop the continuation of infringement activities i.e. the continuation offence. And then within a reasonable time produced before a Magistrate. The provision says further, that any person having an interest in seized material may, within fifteen days of such seizure, make an application to the Magistrate for such material being restored to him. The Magistrate, after hearing the applicant and the complainant and making such further inquiry as may be necessary, shall make such order on the application as he may deem fit.[166]

4.3.4.3 ADMINISTRATIVE REMEDIES

Section 6 of Indian Copyright Act makes provisions about certain disputes to be decided by Appellate Board. According to this section—

"If any question arises—

(a) whether a work has been published or as to the date on which a work was published for the purposes of Chapter V[167], or

(b) whether the term of copyright for any work is shorter in any other country than that provided in respect of that work under this Act, it shall be referred to the Appellate Board constituted under section 11 whose decision thereon shall be final:

[166] See section 66 of the Indian Copyright Act.
[167] Under chapter v the provisions related to the term of copyright are given.

Provided that if in the opinion of the Appellate Board, the issue of copies or communication to the public referred to in section 3[168] was of an insignificant nature, it shall not be deemed to be publication for the purposes of that section.

It is noteworthy to mention here that the Appellate Board shall ordinarily hear any proceeding instituted before it under this Act within the zone[169] in which, at the time of the institution of the proceeding, the person instituting the proceeding actually and voluntarily resides or carries on business or personally works for gain.[170]

The Appellate Board will give their decision in any disputes with respect to assignment of copyright.

If an assignee fails to make sufficient exercise of the rights assigned to him, and such failure is not attributable to any act or omission of the assignor, then, the 3 [Appellate Board] may, on receipt of a complaint from the assignor and after holding such inquiry as it may deem necessary, revoke such assignment.[171]

Again "If any dispute arises with respect to the assignment of any copyright, the Appellate Board may, on receipt of a complaint from the aggrieved party and after holding such inquiry as it considers necessary, pass such order as it may deem fit including an order for the recovery of any royalty payable: Provided that the Appellate Board shall not pass any order under this sub-section to revoke the assignment unless it is satisfied that the terms of assignment are harsh to the assignor in case the assignor is also the author: Provided further that, pending the disposal of an application for revocation of assignment under this subsection, the Appellate Board may pass such order, as it deems fit regarding implementation of the terms and conditions of assignment including any consideration to be paid for the enjoyment of the rights assigned: Provided also that no order of revocation of assignment under this sub-section, shall be made within a period of five years from the date of such assignment."[172]

4.3.4.4 APPELLATE REMEDIES

Section 71 to 73 under chapter VIV of the Indian Copyright Act provided the provisions about appeals against certain orders of Magistrate.

4.3.4.4.1 APPEALS AGAINST CERTAIN ORDERS OF MAGISTRATE – SECTION 71

Section 71 makes the provisions about appeals against certain orders of Magistrate. This section reads as—

'Any person aggrieved by an order made under subsection (2) of section 64 or section 66 may, within thirty days of the date of such order, appeal to the Court to which appeals from the court

[168] Section 3 gives Meaning of publication— "For the purposes of this Act, "publication" means making a work available to the public by issue of copies or by communicating the work to the public."
[169] In this sub-section "zone" means a zone specified in section 15 of the States Reorganisation Act, 1956 (37 of 1956); Explanation section 12 of the Indian Copyright Act.
[170] See Section 12 of the Indian Copyright Act; Power and procedure of Appellate Board.
[171] section 19A (1) of the Indian Copyright Act
[172] section 19A (2) of the Indian Copyright Act

making the order ordinarily lie, and such appellate court may direct that execution of the order be stayed pending disposal of the appeal."

Thus any person can make appeal to the related higher court against the order of magistrate, within 30 days of passing such order.

4.3.4.4.2 APPEALS AGAINST ORDERS OF REGISTRAR OF COPYRIGHTS AND APPELLATE BOARD – SECTION 72

Section 72 provided the provisions of appeals against orders of Registrar of Copyrights and Appellate Board. This section says—

"(1) Any person aggrieved by any final decision or order of the Registrar of Copyrights may, within three months from the date of the order or decision, appeal to the Appellate Board.

(2) Any person aggrieved by any final decision or order of the Appellate Board, not being a decision or order made in an appeal under sub-section (1), may, within three months from the date of such decision or order, appeal to the High Court within whose jurisdiction the appellant actually and voluntarily resides or carries on business or personally works for gain:

Provided that no such appeal shall lie against a decision of the Appellate Board under section 6.

(3) In calculating the period of three months provided for an appeal under this section, the time taken in granting a certified copy of the order or record of the decision appealed against shall be excluded.

Thus section 72 provided provisions regarding appeal against the final decision of order of registrar of copyrights and appellate board. The High Court may make rules consistent with this Act as to the procedure to be followed in respect of appeals made to it under section 72.[173]

4.3.4.5 A PERSON CAN OBTAIN CIVIL AND CRIMINAL REMEDIES SIMULTANIOUSLY

There are no provision under the Indian Copyright Act, 1957 and criminal procedure code which provide restriction on person aggrieved by infringement of their copyright, to take civil and criminal remedies at same time.[174]

4.4 SUMMARY

Copyright law provided protection to the creativity and originality. Any new invention takes lot of money and time. After successful invention copyright provided them exclusive rights upon his work. Which he can enjoys for a limited time period and may throughout his life time in some cases, such as literary, dramatic, musical and artistic works. Section 51 of Indian Copyright Act, 1957 says about the 'infringement'. Infringement of copyright constitutes in the circumstances when any person does any act without the permission of copyright owner or

[173] Section 73 of the Indian Copyright Act.
[174] Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications. P. 173

registrar of copyright, which intervene directly or indirectly to the exclusive rights of the copyright owner. The common forms of infringement are:

1. Reproduction and publication of work in any material form;
2. Communication of work to the public;
3. Performance of the work in the public through any medium;
4. Making sale or hire of the work;
5. Making adaptation and translation to the work.

In a land mark judgement of *Anand vs Deluxe Films*[175] the Supreme Court of India laid down the principles for deciding infringement of copyright:

1. The way in which the author of work express their idea;
2. There is no copyright on an idea;
3. Substantial similarities from the copyrighted work;
4. Appears to be copy of original work;
5. Different presentation on same theme does not constitute violation of copyright;
6. If similarities are purely incidental then no copyright infringement;
7. Clearly proved act of piracy;
8. Totality of impression of copy of original by the viewers in a film or play.

To established balance between rights of creator and interest of society, there are some exceptions in the copyright law, which cater the need of society. Section 52 of Indian copyright Act lays down the exceptions in this regards. Fair dealing, making copies or adaptation of computer programme for specific purposes, reporting of current events, reproduction in connection with judicial proceedings, and legislative purposes or making certified copies, reading or recitation of extracts, publication for the use of educational institutions, reproduction by teacher or students in the course of instruction and education, performance in the course of activities related to educational institutions or by an amateur club or society, making and using sound recording under certain circumstances and in enclosed room, etc.. Due to fragile nature of the copyright in sound recording and video films special provisions are provided under section 52 A by the 1984 Amendment Act to the Copyright Act.

The Indian Copyright Act, 1957 provided civil, criminal, administrative and appellate remedies for the infringement of copyright. These remedies can be summarized and easily understood from the Table- 1, given below:

NATUER OF REMEDIES	PROVISION OF THE ACT	REMEDY/PUNISHMENT	JURISDICTION
CIVIL REMEDIE-S: CHAPTER XII	Section 54. Definition of 'owner of copyright' Section 55. Civil remedies for infringement of copyright	injunction, damages, accounts and otherwise	Section 62. Jurisdiction of court over matters arising under this Chapter- the

[175] AIR 1978 SC 1613 (1627). Intellectual property rights and the law by Dr G.B. Reddy; Gogia law agency, Hyderabad; p.146

(SECTION-S 54 TO 62)	Section 56. Protection of separate rights (any work owned by different persons) Section 57. Author's special rights Section 58. Rights of owner against persons possessing or dealing with infringing copies Section 59. Restriction on remedies in the case of works of architecture Section 60. Remedy in the case of groundless threat of legal proceedings Section 61. Owner of copyright to be party to the proceeding	Damages recovery of possession of All infringing copies and all plates used or intended the production of such infringing copies, injunction or damages or both	district court having jurisdiction.
CRIMINAL REMEDIES-CHAPTER XIII (SECTION-S 63 TO 70)	Section 63. Offence of infringement of copyright or other rights conferred by this Act Section 63-A. Enhanced penalty on second and subsequent convictions Section 63-B. Knowing use of infringing copy of computer programme Section 64. Power of police to seize infringing copies/plates Section 65. Possession of plates for purpose of making infringing copies Section 65A. Protection of technological measures Section 65B. Protection of Rights Management Information Section 66. Disposal of infringing copies or plates for	Imprisonment 6 months to 3 years and fine of 50 thousand to 2 lakh rupees Imprisonment 1 to 3 years and fine 1 lakh to 2 lakh Imprisonment of 7 days to three years and fine of 50 thousand to 2 lakh imprisonment up to two years and fine same as above same as above and also available civil remedies court delivered to the owner of the copyright or making order deemed fit regarding the	Section 70. Cognizance of offences.— No Court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence under this Act

	purpose of making infringing copies Section 67. making false entries in register, etc., for producing or tendering false entries Section 68. making false statements for the purpose of deceiving or influencing any authority or officer Section 68A. Penalty for contravention of section 52A Section 69. Offences by companies	disposal of such copies or plates imprisonment up to one year or fine, or both same as above imprisonment up to three years and fine proceeded against and punished accordingly	
APPEAL-LATE REMEDI-ES CHAPTER XIV (SECTIO-NS 71 TO 73)	Section 71. Appeals against certain orders of Magistrate Section 72. Appeals against orders of Registrar of Copyrights and Appellate Board Section 73. Procedure for appeals	court may direct execution of the order be stayed pending disposal of the appeal appeal to the Appellate Board and to the High Court respectively	Court to which appeals from the court making the order ordinarily lie High Court may make rules as to the procedure to be followed in appeals made under section 72.
ADMINI-STRATIV-E REMEDI-ES	Section 6. Certain disputes to be decided by Appellate Board Section 19A. Disputes with respect to assignment of copyright	May revoke such assignment and/or recovery of any royalty payable	Appellate Board constituted under section 11 of copyright law

TABLE - 1

4.5 GLOSSARY

1. **COMPETENT AUTHORITY:** Competent Authority means any national or local agency, authority, department, inspectorate, minister, ministry official, parliament or public or statutory person (whether autonomous or not) of any government of any country having jurisdiction over either any of the activities contemplated by this Agreement or the Parties including the European Commission, the Court of First Instance and the European Court of Justice.[176]
2. **SECTION 51 (1)(AA):** The following acts shall not constitute an infringement of copyright, namely,—

the making of copies or adaptation of a computer programme by the lawful possessor of a copy of such computer programme, fromsuch copy—

(i) in order to utilise the computer programme for the purpose for which it was supplied; or

(ii) to make back-up copies purely as a temporary protection against loss, destruction or damage in order only to utilise the computer programme for the purpose for which it was supplied;

3. **ADAPTATION:** "adaptation" means,- (i) in relation to a dramatic work, the conversion of the work into a non-dramatic work; (ii) in relation to a literary work or an artistic work, the conversion of the work into a dramatic work by way of performance in public or otherwise; (iii) in relation to a literary or dramatic work, any abridgement of the work or any version of the work in which the story or action is conveyed wholly or mainly by means of pictures in a form suitable for reproduction in a book, or in a newspaper, magazine or similar periodical; (iv) in relation to a musical work, any arrangement or transcription of the work; 4 [and] 4 [(v) in relation to any work, any use of such work involving its rearrangement or alteration;[177]
4. **ASSINGMENT OF COPYRIGHT[178]:** The Indian Copyright Act stipulates that the owner of the copyright can assign the entire copyright or make the partial assignment of the rights on certain terms and conditions for a limited period or for the whole term of copyright. The assignment, which is in the nature of the contract, shall be in writing. Assignment of a copyright is valid only if it is in writing.[179]
5. **TRIPS AGREEMENT, PARA 2 OF ARTICLE 50:** Article 50:2 requires that judicial authorities have the power to adopt provisional measures "*inaudita altera parte*" (outside the hearing of the other party) where delay may cause irreparable harm. This means that the IPRs holder should be entitled to seek a prompt order whether or not the party alleged to be acting in an infringing manner can be notified and given opportunity to be heard. In this event, the affected party should be notified promptly, and be given an opportunity to be heard and contest the measures that have been taken.[180]

[176] https://www.lawinsider.com/dictionary/competent-authority
[177] Section 2 (a) of Indian Copyright Act, 1957
[178] Section 18 and 19 of Indian Copyright Act, 1957
[179] K. A. Venugopal Setty Vs Dr. Suryakantha U. Kamath, AIR 1992, KER 1.
[180] http://unctad.org/en/Docs/edmmisc232add18_en.pdf

4.6 SAQS

8. SHORT ANSWER QUESTIONS

(vii) Which section of the Copyright Act, 1957 empowers the owner of copyright to grant an interest in the right by a license in writing?

(viii) In a musical sound recording there are many right holders. Is it necessary to obtain licence to each right holder?

(ix) Who is the first owner of the copyright in relation to a musical work?

(x) Is import of one copy of any work for the private and domestic use of the importer is constitutes infringement?

(xi) What is the importance of the section 52 A?

(xii) A cable operator was transmitted a cinematograph film which no member of the public see. Is it still a communication to the public?

(xiii) What is the penalty on second and subsequent convictions under offence of infringement of copyright?

(xiv) Who has the jurisdiction to takes cognigence of offences under copyright act?

(xv) Can a person obtain civil and criminal remedies simultaneously?

9. FILL IN THE BLANKS

(xiv) Special provisions of ----------of copyright act intact the right of integrity as well as the right of paternity of author and thus save the honour of author even after his death.

(xv) If a person has delivered any address or speech on behalf of a other person, such ----------shall be the first owner of the copyright.

(xvi) Infringement of copyright of cinematographic works takes two principal forms, namely ---------- and----------.

(xvii) All copies of the work in which copyright subsists are the ----------of the owner of that work.

(xviii) Section 71 makes the provisions about ----------against certain orders of Magistrate.

(xix) The ----------will give their decision in any disputes with respect to assignment of copyright.

(xx) ----------gives power to police to seize infringing copies.

10. TRUE AND FALSE TYPE QUESTIONS

(i) A author has bundles of right in the same work. (true/false)

(ii) Question papers set for the examination are not come under copyright protection. (true/false)

(iii) Rewarding creativity through copyright giving exclusive authority on the creation is necessary to create more and motivate others to create. (true/false)

(iv) India becomes the hub of piracy in various field. (true/false)

(v) In the case of infringement related to the literary, dramatic, musical or artistic work the name of author or publisher appear on the work, shall not be presumed as original by the court. (true/false)

(vi) Chapter XII of the Indian Copyright Act deals with the civil remedies against the infringement of copyright. (true/false)

(vii) Any police officer of the rank of a sub inspector, may, if he is satisfied that an offence under section 63 in respect of the infringement of copyright in any work has been, is being, or is likely to be, committed, can seize all infringing material without warrant. (true/false),

4.7 REFERENCES

1. http://copyright.gov.in/documents/handbook.html
2. TRIPS Agreement
3. Intellectual property rights and the law by Dr. G.B. Reddy; Gogia law agency, Hyderabad
4. Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications
5. http://unctad.org/en/Docs/edmmisc232add18_en.pdf
6. http://www.copyright.gov.in/Documents/CopyrightRules1957.pdf
7. https://www.lawinsider.com/dictionary/competent-authority

4.8 SUGGESTED READINGS

1. Indian copyright Act, 1957
2. Intellectual property rights and the law by Dr. G.B. Reddy; Gogia law agency, Hyderabad
3. Intellectual Property Laws by Dr C.P. Singh; Allahabad law agency publications
4. TRIPS Agreement
5. http://copyright.gov.in/documents/handbook.html

4.9 TERMINAL QUESTIONS AND MODEL QUESTIONS

1. What are the exclusive rights conferred upon the owner of copyright? Explain in brief.
2. Explain the various acts, those constitutes the infringement of copyright under section 51 of copyright act.
3. What are moral rights given to the author of a work?
4. Describe those act which come under the meaning of communication to the public and constitutes infringement of copyright.
5. What are the special provisions regarding to the sound recording and video films? What is the penalty for contravention of these provisions?
6. Piracy of foreign and good indigenous book in the field of education prevalent in India and seasonal in nature. Comment.
7. What are the provisions regarding importation of infringing copies into India?
8. What acts shall not constitute an infringement of copyright?
9. Civil remedies are not available in the case of works of architecture. Comment.
10. Write short notes on the following:

(i) Preventive civil remedies

(ii) Compensative civil remedies

(iii) Anton pillar order
(iv) Protection of separate rights
(v) Appellate remedies
(vi) Administrative remedies
(vii) Power of police to seize infringing copies, under offence of section 63
(viii) Sections- 65A and 65B

11. Can an owner of copyright be party of proceedings? Give the related provisions.
12. What are the criminal remedied available to the owner of a work under the Indian copyright Act?
13. If a firm contravene the provisions of Indian Copyright Act. Can his offence be punishable under the provisions of copyright act?

4.10 ANSWER

SAQS

1. (i) Section 30; see 4.3.2.1.1; (ii) Yes; see 4.3.2.1.1; (iii) the composer; see 4.3.2.1.1; (iv) Yes; see 4.3.2.1; (v) provided special provisions regarding to the sound recording and video films; see s 4.3.2.1.5; (vi) Yes; see 4.3.2.1.3; (vii) Imprisonment 1 to 3 years and fine 1 lakh to 2 lakh; see 4.3.4.2.1; (viii) Metropolitan Magistrate or first class Judicial Magistrate; see 4.3.4.2; (ix)Yes; see 4.3.4.5;

2. (i) section 57; see 4.3.2.1.2.2; (ii) other person; see 4.3.2.1.1; (iii) 'video piracy', 'cable piracy'; see 4.3.2.1.4; (iv) property; see 4.3.4.1.6; (v) appeals; see 4.3.4.4.1; (vi) Appellate Board; see 4.3.4.3; (vii) Section 64; see 4.3.4.2.9;

3. (i) True; see 4.3.2.1.2.1; (ii) False; see 4.3.1; (iii) True; see 4.3.1; (iv) True; see 4.3.2.1.4; (v) False; see 4.3.4.1.3; (vi) True; see 4.3.4.1; (vii) True; see 4.3.4.2.9;

Terminal question and modern question

1. See 4.3.2.1.2;
2. See 4.3.2.1;
3. See 4.3.2.1.2.2;
4. See 4.3.2.1.3;
5. See 4.3.2.1.5 and 4.3.4.2.6;
6. See 4.3.2.1.4;
7. See 4.3.2.1.6;
8. See 4.3.3;
9. See 4.3.4.1.9;
10. (i) See 4.3.4.1 (ii) See 4.3.4.1 (iii) See 4.3.4.1.4 (iv) See 4.3.4.1.7 (v) See 4.3.4.4 (vi) See 4.3.4.3 (vii) See 4.3.4.2.9 (viii) See 4.3.4.2.8
11. See 4.3.4;
12. See 4.3.4.2;

13. See 4.3.4.2.7;

UNIT-5

UNDERSTANDING PATENTS

STRUCTURE

5.1. **INTRODUCTION**

5.2. OBJECTIVES

5.3. SUBJECT

5.3.1. Meaning of Patent

5.3.2. Origin of the term 'Patent'

5.3.3. Requirements of Patent

5.3.3.1. New Invention

5.3.3.2. Inventive Step

5.3.3.3. Industrial Application

5.3.4. Indian Patent Law

5.3.5. Product Patent and Process Patent

5.3.6. Inventions not patentable

5.3.7. Controller of Patents and Other Officers

5.3.8. Patent Office and its Branches

5.3.9. Patent Procedure

5.3.9.1. Filing of a Patent Application

5.3.9.2. Patent Applicant

5.3.9.1.2. Unity of Invention

5.3.9.1.3. Place of Filing

5.3.9.1.4. Language of Filing and Format

5.3.9.1.5. Form of Application

5.3.9.1.6. Provisional and Complete Specification

5.3.9.1.7. Priority Date

5.3.9.2. Examination of Patent Application

5.3.9.3. Publication of the Patent Application

5.3.9.4. Pre-grant Opposition

5.3.9.5. Patent Grant and Publication

5.3.10. Rights of the Patentee

5.4. **SUMMARY**

5.5. SAQS

5.6. REFERENCES

5.7. SUGGESTED READINGS

5.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

5.1. INTRODUCTION

Patent, as a concept of intellectual property is a resource for knowledge based industries. This aspect is well recognised the world over. The primary objective of Patent Law is to promote the progress of scientific research and technology for public good. It achieves this objective by granting exclusive rights to inventors over their inventions for a limited period of time. Through the grant of exclusive rights to inventors, the law encourages them and investors to invest in research and development. Patent is granted not for an idea, however, outstanding it may be, but for novel, useful and inventive way of carrying it out. Patent is an award conferred to recognise the intellectual input that encloses the idea.

5.2. OBJECTIVES

After reading this unit you will be able to:

- Know the meaning of Patent.
- Understand the essentials of a Patent.
- Determine the Product Patent and Process Patent
- Find out the subject matter of Patentable inventions.
- Comprehend the process of granting of patents and rights of Patentee.

5.3 SUBJECT

5.3.1. Meaning of Patent

Patent is a monopoly right conferred by the Patent Office on an inventor to exploit his invention for a limited period of time. During this period the inventor is entitled to exclude anyone else from commercially exploiting his invention. The exclusive rights of the inventor can be exercise by a person other than the inventor with the previous permission or authorisation of the inventor. The person to whom the patent is granted is known as the patentee. According to section 2 (1) (m) of the Patents Act, 1970 ‘patent’ means a patent for any invention granted under this Act.

5.3.2. Origin of the term ‘Patent’

The term 'Patent' has its origin in the term "Letters Patent". The expression "Letters Patent" meant open letters as distinguished from closed letters. These were instruments under the Great Seal of the King of England addressed by the Crown to all its subjects at large, in which the Crown conferred certain rights and privileges on one or more individuals in the kingdom. In the later part of the nineteenth century new inventions in the field of art, process, method or manner of manufacture, machinery, apparatuses and other substances, produced by manufacturers were on the increase and the inventors became very much interested that the inventions done by them should not be infringed by anyone else by copying them or by adopting the methods used by them. To protect the interests of the inventors, the then British rulers enacted the Indian Patents and Designs Act, 1911.

5.3.3. Requirements of Patent

The Patents Act, 1970 requires that in order to be patentable, an invention has to be new or novel, involves inventive step and must be capable of industrial application.

5.3.3.1. New Invention

'New Invention' means any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification. An invention is patentable only if it is novel or new in the light of prior art, or is not anticipated by the prior art. Prior art includes all information and knowledge relating to invention that was available on the date of patent application.

If an invention is published in any document or used anywhere in the world, it will be considered to be part of prior art or public domain, and will, therefore, not be considered novel. If any invention is new, further inquiry must be made to find out whether it is "new enough", that is not obvious to a person with ordinary skill in the art.

There are no universally accepted standards for testing the requirements of novelty or inventive step. The standards of novelty and inventive step differ from country to country and from time to time. In view of lack of definition for novelty, inventive step and industrial application in the TRIPS Agreement, it is left to the national laws of the member countries to define these concepts.

5.3.3.2. Inventive Step

Inventive step is defined under the Patents Act to mean "a feature of the invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention obvious to a person skilled in the art." The invention must be non-obvious to a person skilled in the art to which the invention relates.

5.3.3.3. Industrial Application

The invention besides being new and non-obvious, must also be useful. An invention which is new and also non obvious but which cannot be put to any beneficial use of mankind, cannot be patented. However, not so useful inventions are protected in some countries as 'utility models'. But that concept is not statutorily recognised in India. The invention must be

capable of industrial application. It means that the invention is capable of being made or used in an industry. An invention which is not capable of industrial application is not patentable in India.

5.3.4. Indian Patent Law

The present legislation on the patents is the Patents Act, 1970. It came into force on April 20, 1972. The Patents Act, 1970 was amended in 1999 by the Patent (Amendment) Act, 1999, that was brought into force retrospectively from January 1, 1995. The amended Act provided for filing of applications for patent products in the area of drugs, pharmaceuticals and agro-chemicals. However, such applications were examined were examined only after December 31, 2004.

The second amendment to the Patents Act, 1970 was made through the Patents (Amendment) Act 2002. This amendment Act came into force on May 20, 2002 with the introduction of the new Patents Rules, 2003 by replacing the Patents Rules, 1972.

The third amendment to the Patents Act, 1970 was introduced through the Patents (Amendment) Ordinance, 2004 w. e. f. January 1, 2005. This Ordinance was later replaced by the Patents (Amendment) Act, 2005 which was brought into force from January 1, 2005.

The major changes introduced in the Indian Patent Act that were required to meet India's obligations to international agreements and treaties. The new Patents Act (Patents Amendment Act 2005) has created a strong patent system in India. Overall the present Act has increased the scope of patenting and provides stringent safeguards to the patentee. The new Act would play a major role in creating a technology driven market.

5.3.5. Product Patent and Process Patent

Patent is granted for an invention which may either be a product or a process, but such product or process should be new, involve inventive step and be capable of industrial application. Prior to the Patents Amendment Act 2005, only process patents were granted in respect of food, drugs and pharmaceuticals in India. No product patent was granted in respect of substances themselves. In *Thomson Brandt* v. *Controller of Patents,* the Delhi High Court held that a 'process of manufacture' is independent of the substance produced by the manufacture. Process of manufacture has a distinctive identity of its own, unconnected with the product of manufacture.

5.3.6. Inventions not patentable

Section 3 and 4 of the Patents Act, 1970 lists the following items that are not patentable in India.

1. An invention which is frivolous or which claims anything contrary to well established natural laws.
2. An invention the use of which would be contrary to morality or injurious to public health or which causes serious prejudice to human, animal or plant life or health, or to environment.

3. The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature.
4. The mere discovery of any new property or new use of a known substance or the mere use of a known process , machine or apparatus unless such known substance results in a new product or employs at least one new reactant .
5. A substance obtained by a mere admixture resulting only in the aggregate properties of the components thereof or a process for producing such substance.
6. The mere arrangement or rearrangement or duplication of known devices functioning independently of one another in a known way.
7. A method or process of testing applicable during the process of manufacture rendering the machine , apparatus or other equipment more efficient, or for the improvement or restoration of the existing machine, apparatus or other equipment for the improvement or control of manufacture .
8. A method of agriculture or horticulture.
9. Any process for the medicinal, surgical, curative, prophylactic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products.
10. Plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals.
11. A mathematical or business method or a computer programme per se or algorithms.
12. A literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever including cinematographic works and television productions;
13. A mere scheme or rule or method of performing mental act or method of playing game;
14. A presentation of information;
15. Topography of integrated circuits;
16. An invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.

In addition to the above said, no patent is to be granted in respect of an invention relating to atomic energy.

5.3.7. Controller of Patents and Other Officers

The Controller General of Patents, Designs and Trade Marks appointed under section 3 of the Trade Marks Act, 1999 is to be the Controller of Patents. The Central Government may appoint as many examiners and other officers as it thinks fit. Such officers are to discharge the functions as may be prescribed to them by the Controller and under his superintendence and directions. The Controller may withdraw any matter pending before an officer by order in writing and for reasons to be recorded and deal with such matter himself from the beginning or from the stage it was so withdrawn. He may also transfer the matter to any other officer and direct such officer to examine the matter from the beginning or from the stage it was so withdrawn.

5.3.8. Patent Office and its Branches

The Head office of the patent office is at Kolkata. The Central Government has also established the branches of the Patent office at Mumbai, New Delhi and Chennai. The Office of the Patent Information System is at Nagpur. The patent office has its own seal.

5.3.9. Patent Procedure

Any person may acquire a patent in India by filing a patent application before the Patent Office. The procedure for acquiring a patent involves the following steps:

1. Filing of a Patent application.
2. Examination of the application
3. Publication of patent application
4. Pre-grant opposition and representation
5. Patent grant and publication; and
6. Post-grant opposition.

5.3.9.1. Filing of a Patent Application

5.3.9.1.1. Patent Applicant

In India, a patent application may be filed by a natural and/or a legal person. The application may be filed by any of the following persons:

a. True and first inventor;
b. Assignee of the inventor; or
c. Legal representative of the inventor.

Any person claiming to be the true inventor of an invention may file a patent application. True and first inventor means a person who conceives the invention. A person who finances an invention but does not play any role in conceiving the invention cannot be considered to be an inventor. But it has to be differentiated from the employer of a an employee. If a person invents something under the employment and in the course of employment then the employer will be considered as the inventor of the invention and he can file an application for patent in the patent office.

An assignee of the invention may also file the patent application, if the true and first inventor assigns the invention to the assignee. An assignee may be a company, firm or any other legal person. While filing the patent application the assignee has to submit the assignment deed executed by the inventor to the patent office in order to prove his right to file the application.

A legal representative of the deceased inventor can also file a patent application. Furthermore, a patent application may be filed jointly by more than one person, if the invention has more than one inventor or assignee.

5.3.9.1.2. Unity of Invention

A patent application can be filed for only one invention or a group of inventions relating to a single inventive concept. If a patent application contains more than one invention or relates

to more than one invention or relates to more than one inventive concept, separate applications have to be filed with regard to each of the invention or inventive concept. For example, if A files a patent application relating to a pen and pen holder, A will be required to file two separate applications because pen and pen holders are two different inventions. However, if A files a patent application relating to a pen and a process of making the pen, A will not be required to file separate applications as the pen and process of making pen relate to a single inventive concept.

5.3.9.1.3. Place of Filing

A patent application must be filed at any of the appropriate patent offices located at Kolkata, Delhi, Mumbai and Chennai. Each patent office has its own territorial jurisdiction. The appropriate patent office for filing a patent application is based on the territory in which:

(a) the applicant or first mentioned applicant in case of joint applicants for a patent, normally resides or has his domicile or has a place of business or the place from where the invention actually originated; or
(b) the applicant for a patent or party in a proceeding if he has no place of business or domicile in India, the address for service in India given by such applicant or party is situated; and
The appropriate office once decided in respect of any proceedings under the Act shall not ordinarily be changed.

5.3.9.1.4. Language of Filing and Format

The patent application and related documents have to be filed in either Hindi or English unless the Controller permits filing in other languages. Such documents must be written, typewritten, lithographed or printed in large and legible characters with deep indelible ink.

5.3.9.1.5. Form of Application

An application may be filed directly at the Indian Patent Office or as a national phase application under the Patent Cooperation Treaty (PCT) or as a Convention application after filing the first application in another country which is recognised under the Patent Act as a Convention country.

A Convention application is a patent application filed at the patent office in India after it was filed earlier in the convention country. Convention country is that country which is signatories or parties to an international, regional or bi-lateral treaty, convention or arrangement to which India is also a signatory or party and which affords to the applicants for patents in India or to citizens of India similar privileges as are granted to their own citizens or citizens to their member countries in respect of the grant of patents and protection of patent rights.

International application for a patent under the Patent Cooperation Treaty (PCT) is an application that designates India and is filed at the Indian Patent Office after completion of the PCT international phase. Furthermore, the specification filed as a part of the PCT application will be treated as a complete specification filed in India. The date of filing of PCT national phase application will be the date of filing or priority of the PCT application. The Indian Patent

Office will start examining PCT national phase application only after 31 months from the priority date of the PCT application.

5.3.9.1.6. Provisional and Complete Specification

The specification is very crucial document. It can be mainly divided into two parts namely the description and the claim. The description is to disclose the invention whereas the claim is to mark out the scope of monopoly rights which are likely to be conferred by the patent office in case the patent is granted. An application for patent is to be accompanied by a provisional or a complete specification. Where an application for patent is accompanied by a provisional specification, a complete specification is shall be filed within 12 months from the date of filing of the application. If the complete specification is not so filed, the application shall be deemed to have been abandoned. The object of filing a provisional specification is to fix the priority date. In between the period of filing provisional specification and complete specification, the inventor may conduct further research and improve his invention. In *Imperial Chemical Ltd. Application* it was stated that a provisional specification needed to contain only a description of the general nature of the invention, its field of application and anticipated result.

5.3.9.1.7. Priority Date

Priority date is the date of first filing, allotted by the patent office to an application. The priority date is significant date to find out the novelty and non-obviousness of an invention that forms part of a patent application. Each claim of the complete specification will have a priority date. If a complete specification is filed after provisional certification, the priority date of a claim in the complete specification will be the date of filing of the application with provisional specification, which contains the subject matter of the claim.

5.3.9.2. Examination of Patent Application

After a patent application is filed, the patent office will examine the eligibility of the application for patent grant under the Patent Act and rules. The process of examination starts with the request for examination and proceeds to examination and then grant or rejection of the application. The examination of the patent application is done by the Controller in co-ordination with the patent examiner. After receiving a request for examination, the Controller refers the application to an examination generally within one month from the date of publication or receiving the application, will review the application and make a report in respect of it.

The examiner, on receiving the application will review the application and make a report of the following:

1. Whether the form of application and specification are in conformity with the requirements of the Patent Act and the Rules;
2. Whether the invention that forms part of the patent application satisfies the patentability requirements such as subject matter, industrial applicability, novelty, inventive step and specification, and

3. Whether the application confirms to any other requirements such as unity of invention and so on, prescribed under the Act and Rules.

The examiner is required to submit the report of the examination to the Controller within one to three months from the date of reference by the Controller. The Controller will review the report and dispose the examination report of the examiner to the Controller within 30 days from the date of receipt from the examiner. The report of the examiner to the controller is confidential and is not open to public inspection. The first report of the examiner will be sent by the Controller to the patent applicant and is called the First Examination Report (FER).

After receiving the FER, the patent applicant has to convince the Controller and put the application in order for grant within twelve months from its date. The FER may either be favourable or adverse to the applicant. If the FER is favourable, the patent application will be allowed by the Controller and granted. However, if the FER is adverse, the gist of objections will be stated in the report and communicated to the applicant. An adverse report may include objections at two levels namely formal objections concerning the form of application or specification or fee, and substantive objections, concerning the patentability requirements or any other requirements under the Act. The Controller may require the applicant to amend the application in order to overcome the objections. The applicant may also contest the objections. He may do so by writing a response to the examination report giving reasons for non-acceptance of the objections. The applicant may also request for a hearing to understand the objections raised in the examination report. The applicant can also withdraw the application at any time after filing of the application and before grant of the patent.

5.3.9.3 Publication of the Patent Application

A patent application filed at the patent office will be kept secret until it is published. An application is published on the expiry of eighteen months from the priority date or filing date of the application, whichever is earlier. The Controller generally publish the application within one month of the expiry of 18 months. If an applicant wishes to publish his application before 18 months period, he may apply to the Controller for an early publication and the Controller will generally publish the application within one month from the date of such application.

A patent application is not published if,

1. Secrecy directions are issued with regard to the application as it relates to atomic energy or defence purposes;
2. The application has been abandoned; or,
3. The application has been withdrawn three months prior to the expiry of eighteen months from priority or filing date.

The publication of an application includes

1. The date of the application;
2. Number of the application;
3. Name and address of the applicant; and
4. The abstract.

On publication of the application:

The patent office will make the specification and drawing of the application available to the public for a fee, and,

If the application includes a deposit, the depository institution will make the biological material mentioned in the application available to the public.

The rights of the patent applicant starts from the date of publication of the patent application. However, a suit for infringement can be filed only after the patent is granted.

5.3.9.4. Pre-grant Opposition

An opposition for the grant of a patent may be filed before or after the grant of a patent. The opposition filed before the patent is granted is called Pre-grant opposition and the opposition filed after the patent is granted is called post-grant opposition. After a patent application is published, any person may file a representation before the Controller against the grant of the patent over the invention that forms part of the application. As per the Patent rules, the Patent Office cannot grant the patent within six months from the publication date, which means that minimum time that a person gets to file a representation is six months from the date of publication.

A representation may be filed on the following grounds:

1. The applicant for the patent wrongfully obtained the invention.
2. The invention that forms part of the patent application lacks novelty and/or inventive step.
3. The patent is not a patentable subject matter.
4. The specification lacks sufficient disclosure or is not enabled.
5. The applicant withheld or disclosed false information relating to the application to the patent office.
6. The convention application was not filed within 12 months from the date of first application in a convention country.
7. The complete specification does not disclose or wrongly mentions the source or geographical origin of the biological material used for the invention.
8. The invention forms part of the traditional knowledge anywhere in the world.

The representation for opposition must be filed at the patent office at which the application has been filed. It must include a statement and any existing evidence in support of the representation.

5.3.9.5. Patent Grant and Publication

If the application satisfies all the requirements of the Patent Act and Rules, the application is said to be in order for grant. An application in order for grant will be granted and the date of patent grant will be entered in the register. The patent grant certificate will be sent to the applicant or agent along with a final version of the complete specification in a compact disc.

A granted patent will be published in the official gazette and will be open for public inspection. The date of the granted patent will be the date of filing of the patent application.

The examination carried out by the examiner or controller does not warrant the validity of the patent.

5.3.9.6. Post-Grant Opposition

A post-grant opposition may be filed by any interested person after the publication of the patent grant and within one year from the date of such publication. A post-grant opposition may be filed based on any of the grounds specified for pre-grant Representation.

5.3.3. Rights of the Patentee

A patent is to confer upon the patentee the following rights:

Where the subject matter of the patent is a product, the exclusive right to prevent third parties without the consent of the patentee from the act of making, using, offering for sale, selling or importing for those purposes that product in India;

Where the subject matter of the patent is a process, the exclusive right to prevent third parties from the act of using, offering for sale, selling or importing for those purposes the product obtained directly by that process in India.

The rights conferred on a patentee under The Act are:

(i) to exploit the patent,
(ii) to licence the patent to another,
(iii) to assign the patent to another,
(iv) to surrender the patent,
(v) to sue for the infringement of the patent.

5.4. SUMMARY

Patent is a monopoly right granted to an inventor to commercially exploit his invention for a limited period of time. In India, this duration is of twenty years. Patent is granted for an invention which may either be a product or a process, but such product or process should be new, involve inventive step and be capable of industrial application. Prior to the Patents Amendment Act 2005, only process patents were granted in respect of food, drugs and pharmaceuticals in India. The Patent Office grants certain rights to the patentee depending upon whether the patent is a product or process.

5.5. SAQS

1 Short Answer Questions

a. What do you mean by ‘Priority date’?
b. What are the rights of the patentee?

2. Fill in the blanks

a. A post-grant opposition may be filed by any interested person after the publication of the patent grant and within …… from the date of such publication.

b. An application is published on the expiry of ……..from the priority date or filing date of the application, whichever is earlier.

3. True or False

a. The date of the granted patent will be the date of filing of the patent application.

b. Patent cannot be granted for the discovery of a new substance occurring in nature.

5.6. **REFERENCES**

Law Relating to Intellectual Property Rights: V. K. Ahuja (Lexis Nexis, 2009)

Law Relating to Intellectual Property: Dr. B. L. Wadhera (Universal Law Publishing Co.,2011)

5.7. **SUGGESTED READINGS**

Indian Patent Law and Practice by Kalyan C. Kankanala, Oxford University Press, 2012.

Principles of Intellectual Property by N.S. Gopalakrishnan and T.G. Agitha.

5.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss the subject matter which are non-patentable as provided under Indian patent law.

b. Describe the process of filing of patent application in India.

Answers

1. a. refer 5.3.9.1.7 b. refer 5.3.3.
2. a. one year b. eighteen months
3. a. True b. True

TERMINAL QUESTIONS AND MODEL QUESTIONS

a. refer 5.3.6.
b. refer 5.3.9.

UNIT-6

INTERNATIONAL CONTEXT OF PATENT LAW

6.1. **INTRODUCTION**

6.2. OBJECTIVES

6.3. SUBJECT

6.3.1. INTERNATIONAL PATENTS

6.3.2. THE TRADITIONAL PATENT SYSTEM

6.3.3. INTERNATIONAL PROTECTION OF PATENTS

6.3.4. INTERNATIONAL PATENT TREATISES

6.3.4.1. PARIS CONVENTION ON INDUSTRIAL PROPERTY

6.3.4.1.1 NATIONAL TREATMENT

6.3.4.1.2. RIGHT OF PRIORITY

6.3.4.1.3. COMMON RULES

6.3.4.2. PATENT CONVENTION TREATY (PCT)

6.3.4.2.1. HISTORY OF THE PCT

6.3.4.2.2. MAIN OBJECTIVES OF THE PCT

6.3.4.2.3. PCT: PATENT FILING SYSTEM

6.3.4.2.4. EFFECT OF AN INTERNATIONAL APPLICATION

6.3.4.2.5. STANDARDIZATION OF INTERNATIONAL APPLICATIONS

6.3.4.3.6. RELATION WITH THE PATENT COOPERATION TREATY

6.3.4.3. EUROPEAN PATENT CONVENTION

6.3.4.3.1. HISTORICAL BACKGROUND

6.3.4.3.2. NATURE AND PURPOSE OF THE EUROPEAN PATENT CONVENTION

6.3.4.3.3. COOPERATION AGREEMENTS WITH NON-CONTRACTING STATES: EXTENSION AND VALIDATION AGREEMENTS

6.3.4.3.4. LEGAL NATURE AND CONTENT

6.3.4.3.5. TERM OF A EUROPEAN PATENT

6.3.4.3.6. RELATION WITH THE PATENT COOPERATION TREATY

6.3.4.3.7. SUBSTANTIVE PATENT LAW

6.3.4.4. WTO-AGREEMENT ON TRIPS

6.3.4.4.1. PATENT PROTECTION UNDER TRIPS

6.3.4.4.2. TRIPS AGREEMENT AND AMENDMENTS TO THE INDIAN PATENTS ACT 1970

6.4. **SUMMARY**

6.5. SAQS

6.6. REFERENCES

6.7. SUGGESTED READINGS

6.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

6.1. INTRODUCTION

Patent protects the economic rights of the patentee. It has several dimensions. There are certain dimensions which are from an international perspective. These are important for the international protection of a patent. These dimensions are treated in every country in different ways and by different international agreements. Presently, the main objective of the international law is to harmonise and bring uniformity in patent laws adopted in different nations. Nevertheless, the real protection of a patent has to take place in domestic level as countries have strong interest to preserve their own patent law.

6.2. OBJECTIVES

After reading this unit you will be able to:

- Understand about the international protection of inventions.
- Find out the significance of international protection of patents
- Know about important international treatises.
- Determine the objectives and subject matter of significant international conventions.
- Comprehend the process of granting of patents internationally.

6.3. SUBJECT

6.3.1. International Patents

A patent only protects an invention in one country or region. There is no such thing as an international or worldwide patent. A worldwide patent does not exist. Each country has its own patent legislation, which regulates the application and granting of patents in that country. International patent law can make it easier to get patents granted in different countries.

6.3.2. The traditional patent system

The traditional patent system requires the filing of individual patent applications for each country for which patent protection is sought. However, this is subject to certain exception of the regional patent systems such as the African Intellectual Property Organization (AIPO) system, the African Regional Industrial Property Organization (ARIPO), and the European patent system. Under the traditional system, the Patent Office with which the application is filed has to carry out a formal examination of every application filed with it. The patent office determines the patentability of the invention. The principal difference between the traditional national patent system and the regional patent systems is that a regional patent is granted by one patent Office for several States.

6.3.3. International Protection of patents

World Intellectual Property Organisation (WIPO) administers the systems of international protection of patents. It simplifies the process for simultaneously seeking IP protection in several countries. The system of international protection enables an inventor to file a single application in one language and pay one application fee. These systems facilitates the process and reduces the cost for obtaining international protection. Patent Convention Treaty is one of such international treaty that simplifies the process of obtaining patent in several countries.

6.3.4. International Patent Treatises

Main treaties which try to facilitate an international protection of patents are:

1. The Paris Convention for the protection of Industrial Property of 1883
2. The Patent Cooperation Treaty of 1970
3. Convention on the Grant of European Patents (EPC) of 1973.
4. Agreement on Trade-related aspects of Intellectual Property Rights (TRIPs) of 1994.
5. Patent Law Treaty (PLT) of 2000

6.3.4.1. Paris Convention on Industrial Property

Paris Convention of Industrial Property was the first and foremost step in the direction of international protection of Patents. Fourteen contracting states also called as Convention Countries signed the Paris Convention on Industrial property in the year 1883. It has been revised in its draft through several conferences which were held at Brussels (Dec. 14, 1990), Washington (June 2,1911), The Hague (Nov. 6, 1925), London (June 2, 1934), Lisbon (Oct. 31,1958 and Stockholm (July 14, 1967). Besides, it has also undergone an amendment on October 2, 1979. It is a significant indication that industrial property must be protected adequately on the international level. This international instrument was the first agreement for the protection of intellectual works globally. The Convention is open to all States. Instruments of ratification or accession must be deposited with the Director General of WIPO. India is a member of the Paris Convention having acceded to it in the year1998. As of January 2019, the Convention has *177* contracting member countries, which makes it one of the most widely adopted treaties worldwide.

The Paris Convention is applicable to industrial property. Industrial Property includes patents, trademarks, industrial designs, service marks, geographical indications and the prevention of unfair competition. The substantive provisions of the Convention fall into three main categories: national treatment, right of priority, common rules. The Indian patent law is in line with the basic principles relating to national treatment, priority rights, and so on, provided in the Paris Convention.

6.3.4.1.1 National Treatment

The Paris Convention in its Article 2 talks of what has been termed as national treatment principle. According to it, the member countries of the convention shall provide the protection to industrial property of citizens of other member's countries in the same way as they do to that of their own nationals. However, the member country have the right to apply or administer the same procedure or jurisdiction on the applicant of patent.
Article 3 of the convention provides the facility of the said national treatment to the nationals of other countries. It provides that nationals of non-contracting states are also entitled to national treatment under the Convention if they are domiciled or have a real and effective industrial or commercial establishment in the territory of one of the countries included in the convention.

6.3.4.1.2. Right of Priority

The Convention provides for the **right of priority** in the case of patents (and utility models where they exist), marks and industrial designs. Article 4 of the convention fixes a priority period of twelve months for a person who has duly filed an application for a patent etc. in one of the member countries for the purpose of filing applications for the protection of the same patent in other countries. These subsequent applications will be regarded as if they had been filed on the same day as the first application. In other words, they will have priority over applications filed by others during the said period of time for the same invention or industrial design. Article 4 further provides that grant of a patent "shall not be reduced and invalidated on the ground that the sale of a patented product or of a product obtained by means of a patented process is subject to restrictions or limitations resulting from the domestic law.

6.3.4.1.3. Common Rules
The Convention lays down a few **common rules** that all Contracting States must follow. The most important are:
Patents granted in different Contracting States for the same invention are **independent of each other**, the granting of a patent in one Contracting State does not oblige other Contracting States to grant a patent, a patent cannot be refused, annulled or terminated in any Contracting State on the ground that it has been refused or annulled or has terminated in any other Contracting State. The inventor has **the right to be named** as such in the patent.
The grant of a patent may not be refused, and a patent may not be invalidated, on the ground that the sale of the patented product, or of a product obtained by means of the patented process, is subject to restrictions or limitations resulting from the domestic law.

Each Contracting State that takes legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exclusive rights conferred by a patent may do so only under **certain conditions.**
A compulsory license (a license not granted by the owner of the patent but by a public authority of the State concerned), based on failure to work or insufficient working of the patented invention, may only be granted pursuant to a request filed after three years from the grant of

the patent or four years from the filing date of the patent application, and it must be refused if the patentee gives legitimate reasons to justify this inaction.
Furthermore, forfeiture of a patent may not be provided for, except in cases where the grant of a compulsory license would not have been sufficient to prevent the abuse. In the latter case, proceedings for forfeiture of a patent may be instituted, but only after the expiration of two years from the grant of the first compulsory license.

6.3.4.2. Patent Convention Treaty (PCT)

The Bureaue Internatioalaux Reunis pour la protection de la Propriete Intellectuale (BIRPI) which is the predecessor of World Intellectual Property Organisation (WIPO) prepared a draft of international treaty in 1967. It was revised by Committee of Experts and was signed at Washington in 1970. This treaty known as "Patent Cooperation Treaty" entered into force on January 24, 1978 and became operational on June 1, 1978. Initially it was signed by 18 contracting states and presently there are 152 members. India has also deposited its instrument of accession in the year 1998 and became its contracting state on 7 December 1998.

The Patent Cooperation Treaty was adopted by member states in order to bring about co-operation between members regarding international patent filing, searching, examination, and other technical services. Patent Cooperation Treaty provides an international filing process for obtaining patents in multiple countries. It enables an applicant in a member state to file a patent application and obtain a patent in all countries designated in the application. It is important to note that the PCT does not provide for the grant of international patents but only plays the role of a facilitator and helps the applicant get a patent granted in his favour in any of the countries of the Paris Union termed as designated offices.

As its name suggests, the Patent Cooperation Treaty is an agreement for international cooperation in the field of patents. It is considered as an important step for international cooperation in this field. It is largely a treaty for rationalization and cooperation with regard to the filing, searching and examination of patent applications and the dissemination of the technical information contained therein. It is noted that the PCT does not provide for the grant of "international patents". The task of and responsibility for granting patents remains exclusively in the hands of the patent Offices of the countries where protection is sought. The PCT system is a patent filing system and should not be mistaken for a patent granting system. Notably, The PCT complements the Paris Convention. Indeed, it is a special agreement under the Paris Convention open only to States which are also party to the Paris Convention.

6.3.4.2.1. History of the PCT

In order to overcome some of the problems involved in the traditional system, a draft of an international treaty was prepared by BIRPI in 1967, and presented to a Committee of Experts. In the following years, a number of meetings prepared revised drafts and a Diplomatic Conference held in Washington in June 1970 adopted a treaty called the Patent Cooperation Treaty.

6.3.4.2.2. Main Objectives of the PCT

The chief objectives of the PCT are:

(a) to simplify and to make more effective and economical methods for applying for patent protection for inventions in several countries;

(b) to get rid of the systems which required filing of several applications for patent of the same invention in several countries and for this end-

(i) to establish an international system which enables the filing with a single office through a single application in one language for the purpose of getting patent granted in the member countries which are mentioned therein by the applicant;

(ii) to provide for the formal examination of the international application by a single patent office;

(iii) to subject each international application to an international search resulting in a report the copy of which is provided to applicant before the same being published;

(iv) to provide for centralised international publication of the international applications with search reports therein; and

(v) to provide a chance to the designated office to consider whether the patent be granted; and if yes, up to what extent invention meets the international criteria for patentability.

(c) to help these member countries cope with increased work load, since an application by the time it reaches a designated office has already been examined as to form by the receiving office and

(d) to facilitate and accelerate access by industries and other interested sectors to technical information related to inventions and to assist developing countries in gaining excess to technologies.

6.3.4.2.3. Patent Filing System

Any national or resident of a PCT Contracting State can file an international application. International applications can be filed in most cases with the national Office, which will act as a PCT receiving Office. Nationals and residents of States which are party to the PCT and to the Harare Protocol, the Eurasian Patent Convention or the European Patent Convention generally also have the option of filing an international application with the ARIPO Office, the Eurasian Patent Office or the European Patent Office, respectively. Nationals and residents of the OAPI countries and of some other developing countries must file international applications with the International Bureau of WIPO, which acts as receiving Office for them. In addition, the

International Bureau acts as a receiving Office at the option of nationals and residents of all PCT Contracting States.

When a PCT application is filed, it is then subjected to an "international search". This search is carried out by an International Search Authority (ISA). The search results in an International Search Report (ISR) and contains details of published documents that have an effect on the patentability of the invention claimed. The ISA also prepares a written opinion on patentability. The international search report and the written opinion are communicated by the ISA to the applicant. During this time the applicant may decide to withdraw his application if opinion in the said report makes the granting of patents unlikely. If the international is not withdrawn, it is published together with the International Search Report by the International Bureau. The procedure under the PCT has great advantages for the applicant, the patent offices and the general public.

6.3.4.2.4. Effect of an International Application

An international application has the effect, as of the international filing date, of a national application in those PCT Contracting States which the applicant designates for a national patent in his application. It has the effect of a regional patent application in those PCT Contracting States which are party to a regional patent treaty, provided they are designated for a regional patent.

6.3.4.2.5. Standardization of international applications

The PCT prescribes certain standards for international applications. An international application which is prepared in accordance with these standards will be acceptable, so far as the form and contents of the application are concerned, to all the PCT Contracting States, and no subsequent modifications because of varying national or regional requirements (and the cost associated therewith) will become necessary. No national law may require compliance with requirements relating to the form or contents of the international application different from or additional to those which are provided for by the PCT.

6.3.4.3. European Patent Convention

The European Patent Convention (EPC) is also known as the Convention on the Grant of European Patents. It came into effect on 5 October 1973. It is a multilateral treaty instituting the European Patent Organisation that provides an autonomous legal system according to which European patents are granted. The term *European patent* is used to refer to patents granted under the European Patent Convention. However, a European patent is not a unitary right, but a group of essentially independent nationally-enforceable, nationally-revocable patents.

The EPC provides a legal framework for the granting of European patents via a single, harmonised procedure before the European Patent Office. A single patent application in one language may be filed at the European Patent Office in Munich at its branch in The Hague, at its sub-office in Berlin or at a national patent office of a Contracting State, if the national law of the State so permits.

6.3.4.3.1. Historical Background

Before 1978, two important problems were arising when seeking to obtain patent protection in Europe in a number of countries. First was the need to file a separate patent application in each country, with a subsequent distinct grant procedure in each country, and secondly the need to translate the text of the application into a number of different languages. Different languages are indeed utilised across the European countries and there is substantial expense in preparing translations into each of those languages. While the European Patent Convention does not totally overcome the need for translations (since a translation may be required after grant to validate a patent in a given EPC Contracting State), it does centralise the prosecution in one language and defers the cost of translations until the time of grant.

6.3.4.3.2. Nature and Purpose of the European Patent Convention

A single European procedure has been established for the grant of patents on the basis of a single application. It created a uniform body of substantive patent law intended to provide easier, cheaper and stronger protection for inventions in the contracting states. In each contracting state for which it is granted, a European patent gives its proprietor the same rights as would be conferred by a national patent granted in that state. If its subject-matter is a process, protection is extended to products directly obtained by that process. Any infringement of a European patent is dealt with by national law.

A published European patent application provides provisional protection which is no less than that conferred by a contracting state for a published national application. It must at least include the right to reasonable compensation in the event of wrongful infringement. The standard term of a European patent is twenty years as from the date of filing. Provided that the annual renewal fees are duly paid, patents remain in force for the maximum term. European patents may also be effective in some countries that have not acceded to the EPC (extension and validation states).

6.3.4.3.3. Cooperation agreements with non-contracting states: extension and validation agreements

Throughout the history of the EPC, some non-contracting States have concluded cooperation agreements with the European Patent Organisation, known as extension or validation agreements. These states then became "extension states" or "validation states", which means that European patents granted by the EPO may be extended to those countries through the payment of additional fees and completion of certain formalities. As is the case in EPO contracting states, the rights conferred to European patents validated/extended to these states are the same as national patents in those states.

6.3.4.3.4. Legal Nature and Content

The European Patent Convention is a special agreement within the meaning of Article 19 of the Convention for the Protection of Industrial Property, 1883 and a regional patent treaty within the meaning of Article 45, paragraph 1, of the Patent Cooperation Treaty of 1970. The EPC currently does not lead to the grant of centrally enforceable patents in all 38 countries.

6.3.4.3.5. Term of a European patent

The EPC requires all jurisdictions to give a European patent a term of 20 years from the filing date. The filing date being the actual date of filing an application for a European patent or the date of filing of an international application under the PCT designating the EPO. The filing date is not necessarily the priority date, which can be up to one year earlier. The term of a granted European patent may be extended under national law if national law provides term extension to compensate for pre-marketing regulatory approval.

6.3.4.3.6. Relation with the Patent Cooperation Treaty

A European patent application may result from the filing of an international application under the Patent Cooperation Treaty (PCT), i.e. the filing of a PCT application, and then the entry into "European regional phase", i.e. the transition from the international to the European procedural stages. The European patent application is therefore said to be a "Euro-PCT application" and the EPO is said to act as a designated or elected Office. In case of conflict between the provisions of the EPC and those of the PCT, the provisions of the PCT and its Regulations prevail over those of the EPC.

6.3.4.4. TRIPS Agreement

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is an international agreement administered by the World Trade Organization (WTO) that sets down minimum standards for many forms of intellectual property (IP) regulation as applied to nationals of other WTO Members.

The World Trade Organization (WTO) is the international organization dealing with the rules of trade between nations. Countries to become members of WTO, undertake to adhere to the 18 specific agreements annexed to the Agreement establishing the WTO. They cannot choose to be party to some agreements but not others.

Of these agreements, Trade-Related Aspects of Intellectual Property Rights (TRIPS) is considered to have great impact on the world trade. The TRIPS Agreement introduced global minimum standards for protecting and enforcing nearly all forms of intellectual property rights (IPR). This Agreement now requires all WTO members, with few exceptions, to adapt their laws to the minimum standards of IPR protection. In addition, the TRIPS Agreement also introduced detailed obligations for the enforcement of intellectual property rights.

6.3.4.4.1. Patent protection under TRIPS

The TRIPS Agreement requires WTO Members to provide protection for a minimum term of 20 years from the filing date of a patent application for any invention including for a pharmaceutical product or process. Prior to the TRIPS Agreement, patent duration was significantly shorter in many countries. For example, both developed and developing countries provided for patent terms ranging from 15 to 17 years, whilst in certain developing countries, patents were granted for shorter terms of 5 to 7 years. The TRIPS Agreement also requires countries to provide patent protection for both processes and products, in all fields of technology.

Before TRIPS, many countries provided only process and not product patents. India was also following the same. Product patents provide for absolute protection of the product, whereas process patents provide protection in respect of the technology and the process or method of manufacture. Protection for process patents would not prevent the manufacture of patented products by a process of reverse engineering, where a different process or method from that which has been invented (and patented) is used. The TRIPs agreement also sets international standards on a number of issues related to IPRs.

6.3.4.4.2. TRIPs Agreement and Amendments to the Indian Patents Act 1970

India became signatory to the Agreement on Trade Related aspects of Intellectual Property Rights (TRIPs) of the World Trade Organization in 1995 along with other developing countries. India became signatory to this agreement with a hope that TRIPs regime will result in free flow of trade, investment and technical know-how among the member countries by removing barriers that exists in the form of differences in the standards of intellectual property. The earlier Indian patent regime under 1970 Indian Patents Act differed in many ways from that of the TRIPs agreement. The Patents Act drastically restricted the rights of patent holders in fields linked to basic needs. The adoption of the Patents Act 1970 was based on a lengthy legislative process and careful consideration of the socio-economic impacts of the patents in sensitive fields such as health and food. Therefore India had to considerably alter its patent law. In order to fully comply with the TRIPs provisions India amended the Patents Act 1970, three times. The first two amendments to the patent legislation took place in 1999 and 2002 mainly to accommodate issues like 'exclusive marketing rights' (EMRs) and to extend the patent protection for the 20 years respectively. In 2005, the Patents Act 1970 has been amended for the third time. Immediately after this amendment the scientific, technical and business communities geared up for intense debate.

TRIPs Article 27.1 states, "Patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application." This provision obliges member countries to grant product and process patents in all fields of technology and sets up three criteria, novelty, inventive step, and industrial applicability, for patentability. The present Act complies with the TRIPS requirements and comply with the international norms.

6.4. SUMMARY

The current international law on Patents include few treatises and agreements. The chief among them include Paris Convention on Industrial Property, Patent Convention Treaty (PCT), European Patent Convention, WTO-Agreement on TRIPS. Beside these treatises there exist several other treatises, conventions and agreements bilateral or multi-lateral, protecting patents in other countries. The main objective of the international law is to harmonise and bring uniformity in different national laws. India being contracting party to Paris Convention on Industrial Property, Patent Convention Treaty (PCT) and WTO-Agreement on TRIPS fulfils the requirements and resolutions passed therein and attempts to brings domestic law in tune with international practices.

6.5. SAQS

1. Short Answer Questions

a. Write short note on Paris Convention on Industrial Property.

b. What are the main objectives of the PCT?

2. Fill in the blanks

a. India became a party to the TRIPs agreement in …….

b. The term of European patent is …….from the date of filing of application for European patent.

3.True or False

a. The PCT does not provide for the grant of "international patents".
b. According to Paris Convention, the member countries of the convention shall provide the protection to industrial property of nationals of other members countries in the same way as they do to that of their own nationals.

6.6. REFERENCES

https://www.wipo.int/treaties/en/ip/paris/

https://www.wipo.int/treaties/en/ip/paris/summary_paris.html

https://www.wipo.int/pct/en/

https://www.wipo.int/treaties/en/registration/pct/summary_pct.html

https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm

https://www.wto.org/english/docs_e/legal_e/27-trips_01_e.htm

Indian Patent Law and Practice by Kalyan C. Kankanala et. al., Oxford University Press, 2012.

6.7. SUGGESTED READINGS

An Introduction to Intellectual Property Rights: J. P. Mishra, Central Law Publications, Allahabad, 2005.

Law of Intellectual Property: V. J. Taraporevala (Thomson Reuters, New Delhi,2013).

6.7. TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss in detail the Patent Protection under WTO-TRIPS agreement and also discuss the amendments in Indian patent law in accordance with it .

b. Write explanatory note on the objectives and contents of Paris Convention on Industrial Property relating to patents.

Answers

1. a. refer 6.3.4.1. b. refer 6.3.4.2.2.

2. a. April 1994 b. 20 years

3. a. true b. false

TERMINAL QUESTIONS AND MODEL QUESTIONS

c. refer 6.3.4.4.1. and 6.3.4.4.2.
d. refer 6.3.4.1.

UNIT-7

INDIAN POSITION ON COMPUTER RELATED PATENTS

7.1. **INTRODUCTION**

7.2. OBJECTIVES

7.3. SUBJECT

7.**3.1. COMPUTER RELATED INVENTIONS**

7.3.2. NEED FOR STRONG IP PROTECTION

7.3.3. MEANING OF SOFTWARE PATENT

7.3.4. EARLY EXAMPLE OF SOFTWARE PATENT

7.3.5. PROTECTION UNDER COPYRIGHT LAW

7.3.6. PROTECTION UNDER PATENT LAW

7.3.7. DIFFERENCE BETWEEN COPYRIGHT PROTECTION AND PATENT PROTECTION TO SOFTWARE PROGRAMS

7.3.7.1. DIFFERENT SUBJECT MATTERS

7.3.7.2. WHO MAY CLAIM RIGHT TO PATENT OR COPYRIGHT

7.3.7.3. RIGHTS CONFERRED

7.3.7.4. DURATION

7.3.8. SOFTWARE PATENTS UNDER INTERNATIONAL TREATISES

7.3.8.1. TRIPS

7.3.8.2. SOFTWARE PATENTS UNDER THE EUROPEAN PATENT CONVENTION

7.3.9. SOFTWARE PATENTING IN OTHER COUNTRIES

7.3.10. LAW ON SOFTWARE PATENTING IN INDIA

7.3.10.1. SECTION 3(K) OF THE PATENTS ACT

7.3.10.2. REQUIREMENT OF GETTING A SOFTWARE PATENT

7.3.10.3. CRI GUIDELINES

7.3.10.4. INDIAN CASE LAW

7.3.11. MERITS AND DEMERITS OF SOFTWARE PATENTS

7.4. **SUMMARY**

7.5. SAQS

7.6. REFERENCES

7.7. SUGGESTED READINGS

7.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

7.1. INTRODUCTION

Protection of Computer related inventions is one of the most contentious issues in the field of IPR. The increasing economic significance of computers and Computer programmes makes software patents more complex. Computer related inventions are protected under Copyright law and Patent law in India. The protection of computer related inventions has continued to be unclear, until the Controller General of Patents, Designs and Trade Marks issued its Guidelines on the examination of computer-related inventions. Recently a new version of these guidelines has been published. It reaffirms the exclusion of the software patents per se and also requires a conventional test of novelty, industrial step and utility to determine the applicability of the Patents Act to computer-related inventions. The Patent law must be such as to meet the latest challenges posed by the industries like computer software particularly in the internet age and global era.

7.2. OBJECTIVES

This unit will enable you to Comprehend:

- Meaning of Software patent
- Indian Patent law on software patenting
- Guidelines for patenting a software
- Merits and Demerits of Software patenting

7.3. SUBJECT

7.3.1. Computer Related Inventions

A computer-related invention (CRI) is also called as computer-implemented invention (CII). It involves the use of a computer, computer network or other programmable apparatus, where one or more features are realised wholly or partly by means of a computer program. CRIs and CIIs are a significant from the point of view of kind of intellectual protection provided to them. Under Indian Law these are protected by copyright as well as patent law.

7.3.2. Need for Strong IP Protection

Software programing has a great value in the digital technology. Almost all economic sectors are nowadays reliant on software. The Software industry has facilitated the economic development in India also. Software industry constitutes an integral part of India's social well-being and economic development. Resultantly, this casts significant implications for intellectual property laws. Further, internet has emerged as a new medium of commerce with the advancement in computer software, combined with large investments in computing and communications. In the wake of growing competition, the need for better protection of the intellectual property in general and patents in particular, is also increased. The huge economic growth and use of combined hardware and software products spurs to rethink about Intellectual property protection provided to them.

The contribution of Software industry is great to the Indian and global economy. Though the Indian software industry created very little new and valuable intellectual property in the past, it needs to be modified in the globalized world. Efforts to promote the growth of software industry are meaningless unless the importance of intellectual property rights for the software industry is realized. The growth of IT industry depends upon the realisation and effective protection of the intellectual property rights. It is imperative on the part of the Government to undertake effective measures to protect intellectual property rights. It can be done by bringing new and effective laws which in turn will encourage innovation and creativity.

7.3.3. Meaning of Software patent

The term "software" does not have a precise definition and even the software industries fail to give a specific definition. But it is basically used to describe all of the different types of computer programs. Computer programs are basically divided into "application programs" and "operating system programs". Application programs are designed to do specific tasks to be executed through the computer and the operating system programs are used to manage the internal functions of the computer. Software is a term used to denote various kinds of programs used to operate computer related devices.

According to Indian Patents Act, 1970 a patent is given to a new product or process which is innovative and capable of industrial application. Similarly a 'Software Patent' is a term given to any performance of a computer recognized by means of a computer program. Software patents also refers to the grants on products or process which involves a software to produce the intended results.

It is well settled principle of patent law that computer programs "as such" are barred from the patentability field. However, if they are integrated into a machine or a process that fulfils the patentability requirements i.e. novelty, inventive step and industrial application, the resulting system or process of operating a computer can be protected by patent if it possesses a technical character.

7.3.4. Early Example of Software Patent

A British patent application entitled "A Computer Arranged for the Automatic Solution of Linear Programming was filed on 21st May 1962. The invention was related to the efficient memory management for the simplest algorithm, and may be purely software means. The patent was granted on August 17, 1966 and perhaps was one of the first software patents granted globally.

7.3.5. Protection under Copyright Law

Copyright registration is more frequently used in India to protect software. According to Section 2(O) of the Copyright Act, 1957 Computer software and programs can be registered as a literary work. Therefore, copyright protection is more appropriate for the protection of a software.

The description of literary work' includes the computer programs. Thus, the computer software programs are protected as literary work under the provisions of the Copyright Act. The Copyright Act 1957 defines the computer as to include 'any electronic or similar device having

information processing capabilities'. The Act defines the ‘computer program' to mean a set of instructions, expressed in words, codes, schemes or in any other form, including a machine-readable medium, capable of causing a computer to perform a particular task or achieve a particular result.

It is evident from the above definitions that the computer program or software is protected as literary work' under the provisions of the Copyright Act 1957. It is evident that the term computer means and includes all types of electronic devices which are having the capability to the process of information fed into it. As such, a cell phone is a computer which is programmed to do among others the function of receiving digital audio signals, convert it into analog audio signal and also send analogue audio signals in a digital form externally by wireless technology. However, the copyright laws in India protect only the specific code and does not provide any protection to the idea behind that code. In addition to the source code, additional aspects of the computer program and the software can be protected by filing appropriate copyrights for the graphics, sounds, and appearance of a computer program.
A software copyright in India does not restrict the creation of a different code with similar functionality and idea, which is protected by obtaining a patent for the software program. Effectively, copyright protection for computer programs prohibits unauthorized copying and infringement of the computer program, including the structure and the design of the computer program.

7.3.6. Protection under Patent Law

Since copyright protection is only extended to the expression of the idea and not the idea itself. Protection was given to source code, object code and screen displays as "look & feel" theory. The main benefit of protecting computer software through the patent system is the strength and wide area of protection provided by the patent laws. An owner of a patent may prevent all others from making, using, or selling the patented invention. A patent protection protects the basic underlying technical idea or principle behind that invention. Since as of general trend in the world is that more than half of 128 countries of the world are giving patent protection to computer programs, this gives a clue that patent protection gives adequate protection to the programmers.

7.3.7. Difference between Copyright Protection and Patent Protection to Software Programs

A computer program consists of both program text and behaviour and therefore have both literal i.e. the program's source and object code - set of instructions which ensure that the computer hardware performs certain functions and non-literal elements like the component algorithms, structure or the Nook and feel' of a computer program. The average computer user has little or no contact with the literal elements but is, certainly interested in what he will see on the screen i.e. look and feel or the user interface of a program, which in turn determines how easy the program is to use and this will relate strongly to its popularity and subsequent commercial success. Thus the value of the program lies in its behaviour. Copyright merely protects literal copying. It means non-literal elements cannot be protected as they relate more

to idea than expression. Computer program is an exception to other literary works as it is not the computer code rather the idea behind the program which makes it valuable. In the hi-tech world, without actually copying the literary work i.e. the text of the source or object code used one can replicate or emulate a computer program and can avoid infringement action thereby making the traditional tests scarce, deficient and futile. Thus valuable aspects of programs such as the useful behaviour generated when programs are in operation and the industrial design responsible for producing this behaviour are vulnerable to rapid imitation. If left unchecked, it would undermine incentives to invest in software development.

Traditionally, software has been protected under copyright law since code fits easily to the description of literary work. Under the Berne Convention the software was protected as works of literature and any software written automatically protected by copyright. While software patenting has recently emerged in the countries like USA, Japan and Europe.

7.3.7.1. Different Subject Matters

The original literary works including computer programs, dramatic works, musical, artistic works, sound recording and cinematographic works are the subject matter of copyright. Copyright protection extends only to the expression of an idea and not the idea itself. For example, a program to add numbers written in two different computer languages would mean as two different expressions of one idea. Moreover independent works also do not constitute infringement of the copyright.

Whereas patents are granted only for new and useful invention involving inventive step. They are conferred on the method or manner of manufacture, machines, appliances or other articles or substances produced by manufacture. The attitude towards the software patenting is skeptical, globally.

7.3.7.2. Who may claim right to patent or copyright?

Under copyright protection the author is generally the owner of the copyright. While the patent is granted to the person applying first.

7.3.7.3. Rights Conferred

The rights conferred by the copyright include the exclusive right to reproduce the material, issue copies, perform, adapt and translate the work. However these rights are not infringed if there is fair use of such rights available to the public. The fair use includes use for academic purpose, private purpose, and non-commercial recreation and so on.

On the other hand the patent right is a monopoly right granted to the patentee. It involves right to prevent others from making, using, offering for sale etc. The protection under the patent right is stronger than copyright. Many patent applications cover very small and specific algorithms or techniques used in number of programs.

7.3.7.4. Duration

There is a difference in the term for which these two rights are granted. The copyright is granted generally for the period of sixty years after the death of the author while patent is granted only

for the period of twenty years. The TRIPS agreement provides that for product patent this term should be 20 years and for process it is 15.

7.3.8. Software Patents under International Treatises

The software patents are subject matter under the following important treatise

i) TRIPS
ii) European Patent Convention

7.3.8.1. TRIPS

Article 27 of the TRIPS Agreement the TRIPS agreement of 1994 stands for international harmonisation of intellectual property rights. Article 27(1) of TRIPS states that: "... Patents shall be available for any inventions, whether products or processes, in all fields to technology, provided that they are new, involve an inventive step and are capable of industrial application." India, after joining World Trade Organization, is bound to comply with the TRIPS Agreement. Article 27 of TRIPS Agreement mandates that patents be granted to all "inventions (process or end product)" in all fields of technology that are new and useful; they should not be obvious or frivolous. Thus, TRIPS does not seem to prevent the granting of patents on computer programs. Article 10 of TRIPS states that the source code and object code shall be protected as literary work under Berne Convention 1971. The dispute of protection of software arises on the issues of copyright or patent protection. The TRIPS agreement mentions the copyright protection of object code and source code. It is difficult to protect computer software under copyright protection because of basic difference between the software and literary work. The copyright protection to software is opposed because of the behavior code dichotomy and the real value of computer program lies in the source code rather than the object code. Thus, the question regarding patent protection for pure software or for its technical application or physical manifestation remains unanswered.

7.3.8.2. Software Patents under the European Patent Convention

Many patents were issued for inventions involving software since the European Patent Convention came into being in the late 1970s. Article 52 EPC excludes the programs for computers from patentability to the extent that a patent application relates to a computer program as such. Computer implemented inventions which only makes a non-obvious technical contribution or solves a technical problem is patentable.

7.3.9. Software Patenting in Other Countries

The position of software patenting in other countries is skeptical. Software patenting has become common in USA and Japan. Due to some landmark cases in USA the patentability of software has initiated. The court ruled that while algorithm as such could not be patented but the devices that utilised them could. Software patents are now enforceable in USA. In Japan also the software is successfully enforced.

7.3.10. Law on Software Patenting in India

In India, the software programs are protected under the copyright law as these programs fall under the category of literary work. The Indian Patent Act, 1970 governs all aspects of the

patent in India, including what can and cannot be patented, guidelines for obtaining a patent, procedure for obtaining a patent, tenure of a registered patent, etc.

7.3.10.1. Section 3(k) of the Patents Act

Section 3 (k), Patents Act, 1970 excludes the following inventions from patentability: mathematical or business method; computer programs *per se* (by itself); or algorithm. What is confusing about the patentability of computer programs under section 3(k) is the use of the phrase '*per se*'. The legislative intent to attach suffix "per se" to computer program is evident by the following view expressed by the Joint Parliamentary Committee while introducing Patents (Amendments) Act, 2002:

"In the new proposed clause (k) the words "per se" have been inserted. This change has been proposed because sometimes the computer program may include certain other things, ancillary thereto or developed thereon. The intention here is not to reject them for grant of the patent if they are inventions. However, the computer programmes as such are not intended to be granted a patent. This amendment has been proposed to clarify the purpose.

Therefore, the Patent Office has been rejecting the majority of patent applications for software patent in India, even though they are high on innovation.

7.3.10.2. Requirement of getting a Software Patent

However, the Manual of Patent Office Practice and Procedure states that not all computer programs or software innovations fall under Section 3(k) of the Indian Patents Act. Hence, some types of software are patentable in India. To make a successful patent application for software, the key is to not focus on getting patent for the software. The focus of the application should be on getting patent for a product in which the software plays an essential part – making the software's patent protection a part of the patent of the product.

In order to obtain a patent in India, an invention must fulfill four criteria:

1. Novelty:-"new invention" means any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e., the subject matter has not fallen in public domain or that it does not form part of the state of the art.

2. Inventive Step:-"inventive step" means a feature of an invention that involves technical advancement as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art.

3. Industrial Applicability: - "capable of industrial application", in relation to an invention, means that the invention is capable of being made or used in an industry.

4. Patentability exclusion for software or computer program:-Mathematical business method computer program per se or algorithms.

Patent applications claiming computer related innovations, software and mobile applications can be patented in India if patent claims are drafted to protect the innovative aspects of such inventions. Specifically, the innovative aspects can include inventive process / methods along with inventive apparatus / system (hardware components).

7.3.10.3. CRI Guidelines

Until 2015, there was no uniformity among the four patent offices on the issue of grant of software patents in India. This fact was also noted by the Intellectual Property Appellate Board (IPAB) in the case, *Yahoo v. Controller, and Rediff*). In the absence of any guidelines on the issue of patents on computer related inventions (CRI), it was found that while some patent offices refused to grant software patents, others were inclined to grant patents on software. In order to remove inconsistencies related to grant of software patents in India, the Controller of Patents issued guidelines related to CRI first in 2015. These are known as CRI Guidelines 2015. Under the 2015 guidelines, patent offices in India were prohibited from issuing business method patents while computer programs could be patentable on the fulfilment of certain conditions.

The CRI Guidelines 2015 were criticised by civil society in India who claimed that the 2015 Guidelines would adversely impact innovation by start-ups in India; they argued that the 2015 Guidelines violated section 3(k) of the Patents Act which expressly prohibited software patents. This led to the recall of the 2015 Guidelines in December 2015 and fresh guidelines were subsequently issued in February 2016. The 2016 Guidelines altered the earlier position to the extent that even patents on computer programs could not be granted unless the inventor could show that the invention included a computer program "in conjunction with a novel hardware" (also known as 'novel hardware requirement'). Business methods continue to remain non-patentable under the 2016 Guidelines.

Guidelines required that the focus of the examiner should be on the underlying substance of the invention and not the particular form in which it is claimed. The claims should be properly construed and the actual contribution of the claim must be identified, and if the contribution lies only in a mathematical method, business method or algorithm, the claims are to be denied. In case of the computer related inventions the following test would apply

1. If the claims are in conjunction with novel hardware, the examiner should proceed to other steps;
2. If the contribution lies solely in the computer program, the claim should be denied; and
3. If the contribution lies in both the computer program as well as the hardware in question, the examiner should proceed to the other steps like novelty, utility and inventive step to determine patentability.

Business methods continue to remain non-patentable under the 2016 Guidelines. While the 2016 Guidelines cleared the legal ambiguity related to software patenting in India, recent trend indicates that software patents (particularly business method patents) are routinely granted by Indian patent offices. As many as four business method patents have been granted in India in 2017..

In the series of issuing guidelines the Indian Patent Office (IPO) has once again revisited the guidelines for examination of Computer Related Invention (CRI) and issued new guidelines on 30th June 2017. Basically, the 2017 guidelines are based on the 2016 Guidelines, the test which was proposed in the 2016 guidelines have done away with the latest one. The Revised guidelines do not expressly lay down any specific tests, indicators or determinants on the patentability of CRIs. Additionally, illustrative examples on non-patentable and patentable claims have also been removed. Accordingly it may be construed that the Patent Examiner should focus on the underlying substance of the invention and not the particular form in which it is claimed.

7.3.10.4. Indian Case Law

There have been several cases in India regarding the software patent cases, and the issues relating to the patents have been discussed in the same. Some of the most important case laws are as under:

Electronic Navigation Research Institute v. Controller General of Patents, was a case for the invention titled "A CHAOS THEORETICAL EXPONENT VALUE CALCULATION SYSTEM" in which the application was denied by the patent office on the ground that the proposed system fell under the category of mathematical formulae even if it resulted in technical effects. The invention claimed a mathematical method to determine and evaluate the time signals.

Yahoo v. Controller of Patents & Rediff.com India Limited, was a case where section 3(k) was discussed in great detail, and the patent application was rejected owing to a business model being embodied via technology. It was implied that the business model disguised as technological innovations would not meet the criteria for the patents being granted in India.

In this case, the patent claims included features of a software tool targeting search terms relevant to Yahoo's business. Accordingly, the IPAB concluded that the technical advance proposed by Yahoo was simply a method of doing business, even if it was a technically smarter way of doing business and, therefore, cannot be patented in accordance with provisions of Section 3(k) of the patents act.

In *Accenture global service GMBH vs. the assistant controller of Patents & Designs*, the patent application was initially refused for patent registration by patent office under the provisions of Section 3(k) of the Indian patents act. However, the patent applicant appealed before the IPAB, and as per the Controller's decision, it was held that the instant invention as claimed is not

software per se but, a system is claimed which is having the improvement in web services and software. Accordingly, it was held that the invention since not falling into the category of section 3(K), viz software per se, corresponding objection was waived and the patent was granted.

In Enercon India Limited v. Aloys Wobben, Germany an invention was presented which had the automated steps for controlling the wind turbine which depended on the external conditions by the use of computer system. The board decided that it was not merely a computer software per se or a set of rules or procedure like algorithms and thus its patentability cannot be objected to. The patent application was granted.

7.3.11. Merits and demerits of software patents

Merits	Demerits
Software patenting protects the idea and the same can be used only subject to the authorization from the patentee.	The software may be protected through other forms of statutory provisions like Copyrights as it may be considered as literary work, as and maintaining patent is a costly affair.
New incentives ranging from royalty to licensing fee would be there.	Short cycles of the software would render the patent useless by becoming outdated and/or obsolete.
It will arouse and incentivize the innovation making more people get into this regime.	Long-term protection would drastically restrain the growth.
Bargaining capacities of the companies will improve.	It would lead to the rise in useless patents and burden on the resources of Patent offices.

7.4. SUMMARY

Grant of Software Patents in India is possible. Patents filed for innovations relating to computer programs, software and mobile applications protect the novel and inventive features of such innovations from being copied by the competitors. Software Patents in India is granted for an embedded software in a mobile application, and/or software plus hardware combination. However, patent law in India does not allow patent protection for software *per se*, whereby patenting a computer program is prohibited. This provision is stated in Section 3 of the Indian Patents Act, which related to Non-Patentable Inventions.

In case of patent claims claiming Computer readable medium, or, Computer Program Products, the Indian patent office categorizes such patent claims as computer programs per se, and hence such claims may not be patented in accordance with Indian patent laws. In light of the Indian patent laws and guidelines published by the Indian patent office for examination of software patents / computer related inventions (CRIs), software patents can be applied in India by way

of combination of hardware and software features, which are novel, inventive and possess industrial applications.

7.5. SAQS

1. Short Answer Questions

a. Write short note on CRI Guidelines.

b. What do you mean by software patenting?

2. Fill in the blanks

a. the computer program or software is protected as ……..under the provisions of the Copyright Act 1957.

b. Business Methods are…….under Indian patent law.

3.True or False

a. Section 3 (k), Patents Act, 1970 excludes the 'computer programs *per se*' from patentability.
b. Software patents can be applied in India by way of combination of hardware and software features, which are novel, inventive and possess industrial applications.

7.6. REFERENCES

Indian Patent Law and Practice by Kalyan C. Kankanala et. al., Oxford University Press, 2012.

Law Relating to Intellectual Property Rights by V. K. Ahuja, Lexis Nexis Nagpur, 2009

7.7. SUGGESTED READINGS

An Introduction to Intellectual Property Rights: J. P. Mishra, Central Law Publications, Allahabad, 2005.

Law of Intellectual Property: V. J. Taraporevala (**Thomson Reuters, New Delhi,2013).**

7.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss in detail the Law on Software Patenting in India.

b. Write explanatory note on the difference between Copyright Protection and Patent Protection to Software Programs.

Answers

1. a. refer 7.3.10.3. b. refer 7.3.3.

2. a. literary work b. non-patentable

3. a. true b. true

TERMINAL QUESTIONS AND MODEL QUESTIONS

a. refer 7.3.10.
b. refer 7.3.7.

UNIT-8

TRADEMARKS IN INTERNET

STRUCTURE

10.1. **INTRODUCTION**

10.2. OBJECTIVES

10.3. SUBJECT

10.3.1. DOMAIN NAME

10.3.2. DOMAIN NAME AS AN ADDRESS ON THE INTERNET

10.3.3. DNS SIMILAR TO TRADITIONAL POSTAL SYSTEM

10.3.3.1. SLDS AND TLDS

10.3.4. ICANN

10.3.5.1. DOMAIN NAME AS A TRADE MARK

10.3.5.2. PROBLEMS IN TREATING TRADE-MARKS AS DOMAIN NAMES

10.3.6. REGISTRATION OF A DOMAIN NAME

10.3.7. DOMAIN NAME DISPUTES

10.3.8. KINDS OF DOMAIN NAME DISPUTES

10.3.8.1. CYBERSQUATTING DISPUTES

10.3.8.2. COMPETITORS DISPUTES

10.3.8.3. 'PALMING OFF' DISPUTES

10.3.8.4. PARODY DISPUTES

10.3.9. DOMAIN NAME DISPUTES RESOLUTION

10.3.10. EFFECT OF VIOLATION

10.3.11. ABSENCE OF LEGISLATION TO PROTECT DOMAIN NAMES

10.3.12. APPLICABILITY OF INFRINGEMENT LAW TO DOMAIN NAMES

10.3.13. APPLICATION OF 'PASSING OFF' TO THE DOMAIN NAMES

10.3.14. JUDICIAL APPROACH

10.4. **SUMMARY**

10.5. SAQS

10.6. REFERENCES

10.7. SUGGESTED READINGS

10.8. TERMINAL QUESTIONS AND MODEL QUESTIONS

10.1. INTRODUCTION

The present world witnesses the ongoing changes in the domain of business and trade activities. This is mainly due to the World Wide Web or internet. The trademarks, nowadays, are not merely used on the products for identification of goods or services but also on the internet for attracting consumers. This electronic commerce has led to a situation which demands equal protection to the trademarks being used on the internet. The widespread use and expansion of internet is also resulting in the hike in the inappropriate or unauthorized use of trademarks on the internet. It is, therefore, need of the hour to keep our legislation in pace with the commercial and trade activities particularly in era of internet. However, e-commerce poses much difficulties in protecting the trademarks due to its international character and related complexities.

10.2 OBJECTIVES

After reading this unit you will be able to:

- Know the meaning of domain name and domain name disputes.
- Determine the relationship between the trademark and domain name.
- Understand the protection provided to trademarks on internet and domain names.
- Comprehend the applicability of Trademark law to domain names.

10.3. SUBJECT

10.3.1. Domain Name

A 'Domain Name' is a name or identity that distinguishes a registrant from another on the internet. An enterprise, by registering its domain name, acquire a unique identity on the internet which fulfils the same purpose in the world of e-commerce as is served by a trade mark in the world of trade and commerce. The domain names are not the numbers but several names or acronyms thereof combined together. For example 'google.com' means a commercial enterprise using the business acronym 'google'. Internet permits the universal access to all users beyond all territories. Thus, it gives worldwide uniqueness to a domain name. It means that no two domain names can be just similar.

Under the Internet system there is an internet Protocol (IP) which allots an all numeric address to each and every computer or server connected with the system. The IP address is not easy to memorise, hence there is need of a domain name.

10.3.2. Domain Name as an address on the internet

A 'Domain Name' is an address on the internet. The Internet Domain Name System (DNS) is the address regime of the virtual world. It is a hierarchical naming system built on a distributed database. This system transforms domain names to IP addresses and makes it possible to assign domain names to groups of internet resources and users. It allows the people to locate one on the internet. The DNS mainly facilitates the users to navigate a trader on the internet. It does so with aid of two components namely the domain name and its corresponding

Internet Protocol number. A domain name is a human friendly address of a computer that is usually in the form which is easy to remember or to identify. An IP number is the unique underlying numeric address such as 192.91.247.53 which is the corresponding IP number for domain name www.wipo.net. These user friendly addresses are commonly referred to as Uniform Resource Locators (URL), which are representing or are connected to numeric Internet Network Address (INA) or Internet Protocol Number (IP number).

10.3.3. DNS similar to Traditional Postal System

The DNS or INA system operates like a traditional postal system. Where a traditional address includes a house number, street, city and state, an INA also has similar elements, such as hostname, sub-domain, second-level domain (SLD) and top-level domain (TLD).

10.3.3.1. SLDs and TLDs

The INAs are divided into SLD and TLD domains, specific domains are called second level domain or SLDs, and the general domains in which the SLDs reside are called top-level domains or TLDs. For example, in the INA 'www.uttaranchaluniversity.com'. the http is the hostname, 'www' is the sub-domain, 'uttaranchaluniversity' is the SLD and 'com' is TLD. Two types of TLDs were already in use even before inclusion of seven new TLDs. These were Generic and Country Code TLDs (ccTLDs).

Generic TLDs (gTLDs) are

.com- for commercial use

.edu.- for educational institutions

.org- for miscellaneous and non-profit organisation

.net- for networking providers

.gov- for government organisations

.int- for international treaty organisation

.mil- for defense

One of the example of Country Code TLD (ccTLD) is '.in' which is used in relation to India.

10.3.4. ICANN

International registration of Domain name System (DNS) is regulated by the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN is a non-profit organisation which oversees the domain name registration. It controls space allocation for all addresses, DNS management, and root server system management functions. ICANN is run by a board of directors, including its President, nine at-large directors and nine directors selected according to a vote of internet users worldwide. It urges the trademark owners to renew their registrations yearly and to report misuse to the agency urgently.

10.3.5. Relationship between Trade mark and Domain Name

Traditionally, a domain name was considered to be merely an address of the trader in the internet, but presently it has become part of the standard communication used by the traders to identify themselves, their products and their activities. The original role of domain name was no doubt to provide an address for computers on the internet. But the internet has developed from a mere means of communication to a mode of carrying on commercial activity. With the increase in the commercial activities on the internet, a domain name is also used as a business identifier.

10.3.5.1. Domain Name as a Trade mark

Domain name is a trade mark used in the internet. There may be differences of opinions at academic level regarding the status of domain names, but the courts in India holds the view that domain name serves the same function as performed by a trade mark. In the case of *Satyam Infoway Ltd.* v. *Sifynet Solutions Pvt. Ltd.*, the Supreme Court after analysing the definition of the 'trade mark' in Section 2 (1) (zb) and a 'mark' in Section 2 (1) (m) of the Trade Marks Act, 1999 held that a distinctive mark in respect of goods or services is a Trade mark. Thus, it is well established that domain name not only serves as an address for internet communication but also identifies the specific internet site.

10.3.5.2. Problems in treating Trade-marks as Domain Names

Internet domain names registration is based on 'first come first-served bases. Thus, any person who is owner of a trade mark can be deprived of his right to register his trade mark as a domain name, if it has already been registered by any other person. The trademark law allows concurrent use of the same mark on different goods or services provided there is no likelihood of confusion. This is not possible under the current IDN registration system. Further unlike trade mark the current Internet technology does not make it possible to differentiate domain names through the use of capitalisation, styled format or fonts.

10.3.6. Registration of a Domain Name

Registration of domain name is an administrative act. It involves a request to domain name registry, payment of fee and allotment, if there is no prior user with the same domain name on Internet. The organisation which monitors the allocation of IP addresses and the related issues is known as the Internet Corporation for Assigned Names and Numbers (ICANN). This organisation has authorised the administration of Top Level Domains to several agencies. The trader willing to register a domain name of its own should contact the administrator of that agency which deals with the top level domain concerned. The administrator would approve the domain name so requested provided it is not already there on the Internet. As mentioned before, no two enterprises can be assigned the same domain name. In India, the agency authorised by ICANN for the administration of domain names is the National Centre for Software Technology at Mumbai.

10.3.7. Domain Name Disputes

There are different kinds of disputes in relation to domain names. One of the most common domain name dispute occurs when a domain name similar to a registered trademark is registered by a person or organisation who is not real owner of trademark. The easiness with which a person or organistaion registers a domain name on the internet is the main cause of the unauthorised use of the already registered trade mark or names in the trademark registry.

ICANN requires every applicant seeking registration of domain name to give an undertaking to agree to mandatory administrative proceedings in case of any complaint by a third party relating to domain name. These proceedings will be conducted before one of the administrative dispute resolution service providers listed at www.icann.org/undrp/approved-providers.htm.

10.3.8. Kinds of Domain Name Disputes

Domain name disputes are complex as different individuals register different type of domain names for different reasons. To understand the proper legal framework surrounding these disputes, it is useful to categorise the types of disputes that arise in relation to domain names.

10.3.8.1. Cybersquatting Disputes

Whenever a trade mark or trade name of someone else is registered by an unauthorised or unconnected person as his domain name, it is called cyber-squatting. Cybersquatting means unauthorised registration or use of domain name. Where a trademark holder neglects or does not register his domain name, the cyber squatters steal their names and get it register in bad faith. This is the most common offence committed by a person or organisation and such offender is called as cyber squatter. Cybersquatting also includes advertisers who mimic well known domain names Sometimes the Cyber squatter registers a famous name or trade mark as domain name with the intent to use such mark inappropriately or to gain the benefits or to sell it to the real trader on higher prices. Cybersquatting is also known as domain squatting. However, in certain cases, cybersquatting is not illegal and perfectly valid. The registration of a word as domain name without bad faith or with the purpose of using it in future is not illegal.

10.3.8.2. Competitors Disputes

The second type of domain name disputes involves registrations by competitors which are sometimes called ‘Pre-emption disputes’. In these situations people register domain names that contain the company name or trademarks of their competitors. Generally this is done either to block the competitor from using the domain name. Generally, courts resolve these disputes under trade mark infringement and unfair competition law.

10.3.8.3. ‘Palming Off’ Disputes

The third type of domain name disputes involves registration of domain names with intent to ‘palm off’ the fame and goodwill of someone else’s trade mark. In these situations, a company, a company registers the domain name of its competitor and then links the domain name of its own company website. This way consumers looking for the competitor will come

to them first. Courts generally resolve these disputes under unfair competition, trade mark infringement and dilution law.

10.3.8.4. Parody Disputes

The fourth type of domain name disputes involve parodies. In these situations, someone registers a domain name that resembles a company's name and trade mark and then uses it in connection with a website that includes commentary or makes a political or satirical statement about it. The legality of this practice is questionable.

10.3.9. Domain Name Disputes Resolution

The World Intellectual Property Organisation attempts to adopt measures which may ensure the protection of intellectual properties worldwide. The WIPO lays down certain norms aimed at regulating the use of domain names vis-a vis trademarks. These norms are adopted by the ICANN under its Uniform Dispute Resolution Policy.

The policy for resolution of disputes regarding domain names is known as the Uniform Domain Name Disputes Resolution Policy. It became effective on October, 1999. In any such administrative proceeding, the complainant must prove that each of the following three elements are present:

(i) that the defendant's domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights;
(ii) that the defendant has no rights or legitimate interests in respect of the domain name;
(iii) That the defendant's domain name has been registered and is being used in bad faith.

10.3.10. Effect of violation

Domain name registered in favour of the applicant can be cancelled or transferred on satisfaction of the three conditions mentioned above. The burden of proving that three elements are present lies on the complainant. The administrative panel decision is limited to cancellation of domain name of the applicant or for the transfer of the said domain name to the complainant. No other relief can be granted by the administrative panel. ICANN cancels, transfers or makes changes to a registered domain name where (a) the registrant himself makes a request, (b) an order of the court or a tribunal of competent jurisdiction requires such action and (c) when an order is passed by an administrative panel.

10.3.11. Absence of Legislation to protect Domain Names

In India, there does not exist any specific legislation which expressly refers to disputes resolution win connection with domain names. The Trade Marks Act, 1999 sought to be used for protecting the use of trade marks in domain names is not extra territorial, therefore it does not provide adequate protection of domain names. The Supreme Court has taken the view that domain names are legally protected to the extent possible under the laws relating to passing off. In India it is well settled that domain names are to be protected on the same lines as trade marks.

10.3.12. Applicability of Infringement Law to Domain Names

The courts in India have time and again apply the law relating to infringement of trademarks to domain name disputes on the internet. The provisions and principles relating to trademark infringement have been applied by the Judiciary while determining the various issues of trademark or Domain name disputes. It is sometimes contended by the squatters that domain name is merely an address on the internet and registration of a domain name with ICANN does not confer any intellectual property right or trade mark right. It is a contract with a registration authority allowing communication to reach the owner's computer through authority's server. Further, it is contended that the registration of domain name is similar to the registration of a company but confers no intellectual property or trade mark rights.

10.3.13. Application of 'Passing off' to the Domain Names

The Phrase 'Passing Off' means to pass off i.e. sell ones goods as belonging to another. Further as the name itself suggest that a case for passing off is instituted to restrain and prevent the defendant from passing off its goods or services to the public as that of the Plaintiff's by using a trade mark or a trade name and now a domain name. The action was instituted not only to protect the Plaintiff's reputation but also to safeguard public's interest. In order to succeed in an action of Passing off, it is required that the defendant must have sold his goods or offered his services in such a manner that it deceives or is likely to deceive the public into believing that the defendant's goods or services are that of the plaintiff's. The Right of action is available to the owner of the trade mark or to the person who invents a word or name and uses it . the norms and rules relating to trade mark have been made applicable to domain names also.

10.3.14. Judicial Approach

Nowadays, there has been a significant increase in the trademark disputes on the Internet. The courts have consistently applied the law relating to passing off to the domain name disputes. In a landmark case of *Satyam vs. Sifynet,* the Supreme Court had in Principle laid down that the trade mark law shall be applicable to the internet and the contentions of the squatters on the same were rejected. It was also held that the prior user had the right to debar the respondent from eating into the goodwill it might have built up in the connection with the name. The Appellant had adduced sufficient evidence to show that he was the prior user and the public associated the trade name SIFY with the appellant.

In the famous case of *British Telecommunication* v. *One In A Million*, where the defendant had got domain name registration for several well-known names wherein the plaintiff organisation had a goodwill, it was held by the court of Appeal as an act of actionable misrepresentation on the part of the defendant.

In *Yahoo Inc.* v. *Akash Arora*, the Delhi High Court granted an injunction restraining the defendant from using the domain name 'yahoo india.com' because it was deceptively similar to 'yahoo' the well-known trade mark of the plaintiff, an American company.

The other important case in this regard is the *Rediff Communications Limited* v. *Cyberbooth and another,* where the plaintiff had a well-known domain name 'Rediff' for services provided by it, and the defendant also got registered 'Rediff' as domain name in

respect of similar services. The court granted an injunction restraining the defendant from using his domain name.

2.4. SUMMARY

Trademarks are used as domain names on the internet. The agency which regulates the registration of domain names worldwide is Internet Corporation for Assigned Names and Numbers (ICANN). ICANN is a non-profit organisation which oversees the domain name registration. The domain name is not merely an address of the trader on the internet but it performs the functions similar to trademark. There are various kinds of domain names disputes like Cyber squatter Disputes, 'Palming Off' Disputes and Parody Disputes. The domain names disputes are resolved internationally by a policy named as 'Uniform Domain Names Disputes Resolution Policy'. The law relating to trademark infringement and principles of common law action of 'Passing off' are applied in adjudicating domain name disputes by the courts in India.

Internet now a days has become an essential part of performing many functions and many people are dependant on internet for many activities. Due to this increase in internet activities traders have also using this as an expansion of their business strategies. It also creates scopes for those who want to gain undue benefits by stealing and registering popular names as domain names. It is incumbent to keep legal provisions abreast with changing scenario and growing commercial activities or trade activities.

2.5 SAQS

1. Short Answer Question.

a. What do you understand by domain name?

b. Discuss the relationship between Trade mark and Domain Name.

2. Fill in the blanks

a. International registration of Domain name System (DNS) is regulated by the _____.

b. The policy for resolution of disputes regarding domain names is known as the _____.

3. True or False

a. Cybersquatting means unauthorised registration or use of domain name.

b. Domain name is a trade mark used in the internet.

2.6 REFERENCES

An Introduction to Intellectual Property Rights: J. P. Mishra

Law of Trade Marks in India: Ashwani Kumar Bansal

https:// www.wipo.int

http:// www.ipindia.nic.in/trade-marks

2.8 TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss the protection available to domain names in India.

b. What do you understand by domain name dispute? Discuss its various kinds.

Answers:

SAQs

1. a. refer 10.3.1. b. refer 10.3.5.

2. a. Internet Corporation for Assigned Names and Numbers (ICANN).

   b. Uniform Domain Names Disputes Resolution Policy.

3. a. True b. True

TERMINAL QUESTIONS AND ANSWERS

a. refer 10.3.11, 10.3.12., 10.3.13. and 10.3.14.
b. refer 10.3.8.

UNIT-9

UNDERSTANDING TRADEMARKS

STRUCTURE

8.1 INTRODUCTION

8.2 OBJECTIVES

8.3 SUBJECT

8.3.1 MEANING OF TRADE MARK

8.3.2 FUNCTION

8.3.3 NEED OF TRADE MARK LAW

8.3.4 ORIGIN OF TRADE MARK

8.3.5 INTERNATIONAL LAW OF TRADE MARKS

8.3.6 LEGISLATIVE HISTORY

8.3.6.1 PROTECTION OF TRADEMARKS PRIOR TO THE TRADEMARKS ACT, 1940

8.3.6.2 ENACTMENT OF THE TRADE MARKS ACT, 1940

8.3.6.3 ENACTMENT OF THE TRADE AND MERCHANDISE MARKS ACT, 1958

8.3.7 ESSENTIALS OF TRADE MARK

8.3.8 SOME OTHER MARKS

8.3.8.1 SERVICE MARKS

8.3.8. 2 PRODUCT MARKS

8.3.8. 3 CERTIFICATION TRADE MARKS

8.3.8.4 WELL KNOWN TRADE MARK

8.3.8.5 DECEPTIVELY SIMILAR WORK

8.3.9 TRADEMARK DISTINGUISHED FROM OTHER INTELLECTUAL PROPERTY RIGHTS

8.4 SUMMARY

8.5 SAQS

8.6 REFERENCES

8.7 SUGGESTED READINGS

8.8 TERMINAL QUESTIONS AND MODEL ANSWERS

8.1 INTRODUCTION &

8.2 OBJECTIVES

After reading this unit you will be able to:

- Define trademark
- Know the function of trade mark
- Understand the need of trade mark law
- Explain international law on trade mark
- Describe the evolution of trade mark law
- Learn the essentials of trade mark
- Understand some other marks
- Distinguish trade marks from other forms of Intellectual Property Rights

8.3 SUBJECT

8.3.1 Meaning of Trade Mark

(i) Meaning

Trademark in its physical form is a symbol. It is a visual symbol which distinguishes the goods or services of one enterprise from those of others. They are the major source of product differentiation. It can be a ticket, label which can be affixed to the article. It can be a design, name, word, letter, signature, numeral or any combination thereof in different shapes and colours.

Thus, trademark is a visual symbol in the form of a word, phrase, design, sound, smell, colour,product, configuration, numbers, combination of those, a device or a label applied to articles of commerce, which is capable of distinguishing the goods or services of one from the others.

Trademark carries an impression or image on the minds of consumers as a result of which the faith is generated of it being genuine and goods of quality.

The trademark must indicate its source in order to individualize a product for the consumers. This does not mean that it must inform the consumer regarding the actual manufacturer. It is sufficient if the consumer can trust on the enterprise even if not known to him.

A person who sells his product under a particular trademark acquires an exclusive right to use of the mark in relation to those goods. Trademarks are recognized as a property which is protected by the law and not simply an image or symbol.This property named trademark can be protected by registering it in the trademark register established by the government. Protection is also available to unregistered trademarks against passing off. The property which is contained in trademark is incorporal property over immaterial things. In many cases the brand value exceeds the value of the physical assets of a company.

This kind of property is equally important and protectable from infringement and theft.

The legal concept of the trademark can be understood by referring to the definition of the trademark in section 2(1)(zb) of The Trademarks Act, 1999.

8.3.2 Function

The function of a trademark is the subject of continuing speculation and debate amongst legal academics. It is frequently said to be the determining factor in assessing questions of trademark validity and infringement.

Legal writers have suggested that trademarks fulfil many functions which include the identification of the product, identification of the physical source, a guarantee as to quality and as well as advertising function.

Trademarks tell the person who is about to buy that what is presented to him and the source of that product or what he has heard of before as coming from that similar source.

It gives the purchaser a satisfactory assurance of the make and quality of the article he is buying. The goodwill of the product is also reflected through its trademark. A trademark may be used to indicate not only that goods are of a particular maker but are goods of that maker of a particular kind or quality. Thus, a trader may indicate his best quality by one trademark, his second quality by another trademark and so on.

The functions of the trademark may be classified in the following categories:

(i) Trademark as indicators of origin – Trademark identifies the product and its origin. The purchaser comes to know about the product through its trademark. These marks deserve protection as they operate as indicators of the trade source from which the goods or services come.A trademark serves the purpose of identifying the source of origin of goods. For example trade name ‘Videocon’ signifies the electronic products produced by Videocon Company of India.

(ii) It guarantees the established quality of goods. For example the quality of toothpaste ‘Colgate’ is well established. A purchaser of ‘Colgate’ toothpaste is assured of its quality. Another examples of it are ‘Brooke Bond’ and ‘Taj Mahal’ as well. The quality of tea sold in the packs marked ‘Brooke Bond Tea’ would be similar. But it would be different from the packs labeled with mark ‘Taj Mahal’.

Although this guarantee of quality is not legally binding. But it is in the trademark owner’s interest to maintain the quality of the goods to which the mark is applied, if not to improve them.

(iii) It is a mean of advertisement of product. Every company who wishes to popularize its product among public has to give its product a trade name and then creates its brand value. For example, ‘Lux’ is a popular name for soap.

(iv) Trademark creates an image of the product in the mind of public. For example, trade name 'Parle' creates an impression and image in the public about the quality of confectionary and biscuits sold by the company.

(v) Trademark protects the public against confusion and deception by identifying the source of origin of particular products as distinguished from other similar products.

(vi) Trademark protects the trademark owner's trade and business as well as the goodwill which is attached to his trademark.

Trademarks are the basic elements in building up a reputation for products or services to which they are attached. It is the fundamental function of the trademark to create goodwill. Goodwill is created by influencing the behaviour of the buyer while purchasing goods. As long as this function of creation of goodwill is performed, any trademark will be an asset for its owner.

8.3.3 Need of Trade Mark Law

The marks associated with goods acquired reputation and goodwill around them. The common law marks could not be registered due to absence of specific law. The owner of a common law mark had to initiate common law proceeding to protect his mark from infringement or passing off. Such a proceeding had to be started each time an infringement occurred. Such proceedings could be initiated only when infringement had taken place and were time consuming. Thus arose the need for a special law on trade marks.

8.3.4 Origin of Trade Marks

The human society has been using signs, symbols or marks in a number of ways. In the earlier times also certain marks, name tags, cattle brands etc. were used to indicate the ownership of goods, chattels and other articles. Marks used on articles began many centuries before the term used in its present sense. Branding has a long history both in India as well as elsewhere.

(i) Early History

Ancient people around the world used marks to identify and classify objects for the same reasons which help use of trademarks today. The earliest marks were probably those marking animals to distinguish who owned whom. Since early commerce was limited to the immediate locality so few merchants needed marks on their products. As commerce developed, marks began to serve a variety of purposes. The purpose behind the use of marks has been changing in its nature and scope all these times.

Egyptian structures erected as early as 4000 BC show quarry marks and stone cutters signs. Artifacts from places such as ancient Egypt were found with various symbols carved thereon. Potter marks appeared in relics left from Greek and Roman periods which were used to identify the maker of a particular vessel.

In trademark treatises it is usually reported that the blacksmiths who made swords in the Roman Empire are thought of, as the first users of trademarks. Bricks and tiles from Mesopotamia and Egypt bore inscriptions indicating the name of monarch or who held power during the time of its building. Marks were used in ancient times, they were in vogue in medieval period, and they are also applied in the modern age.

During the 10^{th} century, a mark was called as merchant's mark. These marks may be considered as one kind of proprietary marks essentially were used to prove the ownership rights of goods. The English in thirteenth century created rules to avoid any replication of products from a certain company to another.

In the fourteenth and fifteenth centuries during the dramatic emergence of merchants and craft guilds, trademark like symbols and logos started to appear as identifier for these firms. Legal scholars have traced the origin of trademarks law in the Anglo-American context to medieval England arising out of the guild systems. The Anglo Indian trademark law is traced back to 1266 A.D. with Bakers Marking Law. It required the bakers to place marks on the loaves of bread that they sold, identifying the baker. Any unstamped bread offered for sale was confiscated and the offending baker was to give heavy damages. The law of bread and beer is an important step in the history of trademarks. The guild system seems to contain many of seeds of what constitutes trademark law today. Although protecting trademarks is relatively later development.

(ii) Origin of Trademarks in India

In the Indian context there are numerous examples of trademarks from the ancient time to present day. Indus valley civilization saw the use and development of distinct seals. Various seals and artifacts having marks were found or excavated from different places. Further in post Indus valley cultures pottery marks and quarry marks were found. These quarry marks indicated the source of stone used in buildings and stone cutters sign helped workers prove their claims to wages. The Indian traders in ancient India had developed their supremacy on the production of certain specific articles. They supplied articles to foreign countries such as the then clothes of Dhaka (now in Bangladesh). The foreigners liked them very much and used to express that this article is Indra made or has come from Indra.

Since the goods of Indian marks were supreme in their quality and nobody else was able to copy them. Hence, Indians did not come for any trademarks or brand name of their goods. The same position remained during the Muslim period in India. But when the East India Company of England captured certain parts of India and began to rule the major portion of the country. The big merchants and traders private as well as corporate established their mark on their products in the market. They required the brand name, style or design to be sold or used under their own specified brand name and no other person or trader should be allowed to use their brand names, style or design. This was the origin of trademark law standing in practice and later evolved in the form of successive enactments on the law of trademarks.

Owing to industrial revolution and competition in the market, the need of protecting trademarks increased more. This was more so due to apprehension of their fraudulent use.

8.3.5 International Law of Trade Marks

Article 15 to 21 of the TRIPS agreement deals with trade mark protection.

8.3.6 Legislative History

Since in the earlier times there was not much growth of markets and there existed few traders or merchants and the scope of imitation and other unfair trade practice was not substantial. Therefore, the need for protecting was not felt. The notion of marks underwent several changes with the growth of mass media.

Some years later the Chancery courts in England further refined the concepts of trademarks, considering them to be the property. These courts recognized that a person affixing trademark to his goods acquired a right in the mark. Consequently, the courts began extending protection to the possession and enjoyment of a trademark, like any other form of property.

The UK Trademarks Registration Act was the first trademark legislation which came into existence in 1875. It provided the registration of trademarks in England for the first time. The rule of East India Company over India was transferred to the British crown in 1858 and the demands for monopoly over the use of marks and restricting imitation by others were gaining ground step by step.

Bombay Mill Owner's Association in 1877 made the first demand for making provisions for registration of trademarks on the lines of English Trademarks Registration Act of 1875. Government of India introduced a bill in 1879 which was referred to a committee. There was division of opinion on whether trademarks already registered in England should be registered afresh in India or not.

8.3.6.1 Protection of Trademarks Prior to the Trademarks Act, 1940

The roots of Indian trademark law are to be found in the common law system of the United Kingdom. In the absence of statutory law only the common law protection was available to a trademark. If one's trademark was misrepresented by another trader, the former could bring an action for deceit against the later at the common law courts. In the early nineteenth century, the jurisdiction of the common law courts and chancery courts was divided. Suits for injunction for trademark violations were filed in the chancery courts which considered these suits to be actions in deceit. The proof of fraudulent intention was essential for a plaintiff to claim an injunction.

When the court of Chancery – the Equity court came into being, it used the action for 'passing off' to protect a trader who had developed a reputation or goodwill through use of a particular sign or symbol. It was in 1838 that the action in deceit evolved into modern day passing off actions. A fresh bill was introduced in 1880 and again the opinion was divided as a result the original bill of 1879 was restored. Consequently the British government of India

had to enact the Indian Merchandise Marks Act, 1889. However, this Act was not a complete code in itself.

8.3.6.2 Enactment of the Trade Marks Act, 1940

In beginning of twentieth century the demand was again resumed for legislation on the subject. It was keenly felt by Indian trading public to have a complete code on the subject of trademarks. The demand gained momentum and ultimately the central government was compelled to accept the necessity for passing an Act. A memorandum was prepared in 1937 which was circulated to all the local governments and commercial bodies for opinion. The opinions were referred to Mr. R.K. Nehru for consideration and report. He accordingly submitted his report. On 19th September, 1939 Sir A. Rama Swami Mudaliar then Executive Councilor of the Government of India for Commerce and Industry moved a Trademarks Bill. It was passed by both houses and received assent of the Governor-General on 11th March 1940. This Act was a consolidating one and enacted with the object to provide more effective protection of trademarks with the increase in trade and commerce.

8.3.6.3 Enactment of the Trade and Merchandise Marks Act, 1958

The Trademarks Act of 1940 was modeled on the English Act of 1938. Subsequently, there were to amending acts in 1941 and 1943, which were intended to remove certain defects in the Act of 1940. After the end of Second World War and conditions which developed later and with the rapid growth of commercial enterprises, changes were felt necessary in the Act. The need was felt to provide more effective protection to the trademarks.

In view of the extensive amendments made in the Trademarks Act, 1940 and the need to amend Indian Merchandise Marks Act, 1889, the new act was needed. It had been thought fit to consolidate the law relating to Trade and Merchandise Marks Act, 1889, Trade Marks Act, 1940 and the related provisions of Indian Penal Code, 1860. The result was the passing of the Trade and Merchandise Marks Act, 1958, which came into force on 25th November, 1959.

8.3.6.4 Enactment of the Trade Marks Act, 1999

In view of the extensive amendments in the Trade and Merchandise Marks Act, 1958, it was thought fit to repeal and re-enact the said Act incorporating the necessary changes. The Trademarks Bill, 1999 was passed by both the houses of Parliament and received the consent of the President on 30th December, 1999. This Act has amended and consolidated the law relating to trademarks and has provided for registration and better protection of trademarks for foods and services. One of the objectives of the Act is the prevention of the use of fraudulent marks.

8.3.7 Essentials of Trade Mark

The definition of 'Trademark' given in the Trademarks Act, 1999 is very wide. In fact a trademark is a visual symbol used in relation to any goods or services to indicate some kind of connection between the goods or services and the person using the mark. In order to bring it within the scope of statutory definition a trademark should satisfy the following essential requirements:

(i) It must be a mark that is a device, brand, heading, label, ticket, name or an abbreviation of a name, signature, word, letter or numeral shape of goods, packaging or combination of colours or any combination thereof.

(ii) It must be capable of being represented graphically. Graphical representation means the representation of a trademark for goods or services in paper form.

(iii) It must be capable of distinguishing the goods or services of one person from those of others.

(iv) It must be used or proposed to be used in relation to goods or services.

(v) The use must be of a printed or other visual representation of the mark.

(vi) The use must be for the purpose of indicating or as to indicate a connection in the course of trade between the goods or services and some person having the right to use the mark either as proprietor or by way of permitted user as the case may be. It is not necessary that the person using the mark should reveal his identity.

8.3.8 Some Other Marks

8.3.8.1 Service Marks

In modern trade, consumers are confronted with both a vast choice of goods of all kinds and variety of services. There is therefore also a need for signs that helps the consumers to distinguish between the different services such as insurance companies, care rental firms, airlines etc. These signs which are used by these services provides essentially performs the same function as by the trademarks for goods. Service mark is a trademark but it is used to identify and distinguish the services of one person from the services of others and to indicate the source of services. For example, Airtel, UP Roadways, Doordarshan, Holiday Inn, Air India, etc. are the famous service providers in different fields. Titles, character's names and other distinctive features of radio and television programmes may be registered as service marks. The only difference is that they are used or registered for services.

8.3.8. 2 Collective Marks

Collective mark means a trademark distinguishing the goods or services of members of an association of persons not being a partnership which is the proprietor of the mark from those of others. The proprietor of the mark is the association.

A partnership firm does not fall under the category of association of persons that can possess collective marks. The primary purpose of collective marks is to distinguish the characteristics features of the product or services from those of others. The trademarks belong to an individual but a collective mark belongs to an association of persons other than partnership firm. For example Bajaj, Godrej etc. A collective mark may normally be used by

the organization as such, but it may be put use by its members. As regards registration, a collective mark is not registered if it is likely to decisive or cause confusion on the part of the public.

8.3.8. 2 Product Marks

This kind of trademark includes any word, name, symbol, or device, colour, scheme or graphical presentation to identify and distinguish a person's goods including a unique product from those manufactured or sold by others. It indicates the source of goods even if that source is unknown.

8.3.8. 3 Certification Trade Marks

Certification trademarks serve a very useful purpose in the society. But these marks are not very popular, as they do not fulfil the aspirations of traders, rather they are for the benefits of the consumers.

In India, Woolmark in respect of articles of wool and Agmark in respect of well recognized certification marks. The presence of the certification mark on the specified products assures the consumers regarding the quality or characteristics of products. Its function is not to indicate that goods have been certified by the proprietor of the mark as to certain characteristics of the goods. It may include geographical origin, ingredients etc.

A certification mark, being a mark in the technical sense of the term, the definition of the expression 'mark' is applicable to it. It must be capable of being represented graphically, for the purpose of registration. Since the definition of a trademark includes a certificate mark, the scope of infringement also covers certification mark.

8.3.8.4 Well known trade mark

The term well-known trademarks has been used for the first time in the Trademarks Act, 1999 and is defined in section 2(1)(zg) of the said Act. Well-known trademark is the ordinary trademark which may acquire the character of well-known trademark. When the consuming public on seeing a trademark on some goods or services, relates it to a trademark already used on some other goods or services, such a trademark is considered to be a well-known trademark Maruti, Xerox, Lux, Colgate are few examples of well-known trademarks.

The definition of Indian Law has been adopted in order to cater the new requirements of Article 16(2) of TRIPS.

8.3.8.5 Deceptively similar work

The expression "deceptively similar" means that which so nearly resembles the other mark as to be likely to deceive or cause confusion. The criteria for determining the deceptivity has not

been laid in law. Every case depends on its own facts. The value of authorities is not of much use when deciding the individual cases.

8.3.9 Trademark distinguished from other Intellectual Property Rights

Patents, designs, copyright and trademarks are industrial property as they are used in some kind of industry or business. They are aptly termed as intellectual property. Intellectual property has acquired a new value and importance worldwide in recent times. Loosely defined, "Intellectual property is a product of human intellect or mind. This property can be purchased or sold, hired or licensed. The rights granted for protection of this property are called Intellectual Property Rights."

An intellectual property right provides tools to extract value from intellectual capital. It has been defined as the right given to people over the creations of their minds.

A patent owner has a monopoly right to make or sell or use the patented product or process for a limited period of time.

The owner of registered design similarly has a monopoly right to apply the design for a limited period of time. In copyright the author of a work in which copyright subsists, is granted the exclusive right for a certain period.

On the other hand, the trademark chosen by a trader is not necessary the result of inventive skill or intellectual labour. The owner of the trademarks gets a perpetual right to use it in relation to particular goods.

This right is for lifelong and perpetual unlike other intellectual property rights. This is the basic difference between trademark right and other intellectual property rights.Trademark is different from patent and copyright with respect of its assignment also. Unlike a patent or copyright where the property rights in here in the invention or the work itself.

A trademark as a form of intellectual property is subject to transfer of ownership. However, since originally, the sole function of trademark was considered to be the identification of source. Goodwill and trademark were considered inseparable and hence assignment of trademark without goodwill was considered not feasible. However, as a result of change in outlook with respect to function of the trademark changed its status from that of symbol of goodwill to the most effective agent of the creation of goodwill. Eventually, it became a good in itself.

8.4 SUMMARY

Trademark is an important tool in trade, commerce and intercourse. Factually, trademark is a symbol attached to the goods or services, which distinguishes them from other goods or services of same description. The origin of trademarks can be traced back to the beginning of the circulation of goods. The history of mankind and religion, owing to industrial revolution and competition in the market, the need of protecting trademarks increased more and also due

to apprehension of their fraudulent use. Basically, there are four types of trademarks namely, trademarks for goods, service marks, collective marks and certification marks. Certain marks such as coloured marks, three dimensional signs, and audible signs, are becoming significant in the present day markets. Trademarks perform various functions namely identification of the product and its origin, it guarantees the established quality of goods, means of advertisement and protects the public against confusion and deception by distinguishing the product or service.

8.5 SAQS

1. Short Answer Question.

a. Define Trade Mark.

b. What are the functions of trade mark?

2. Fill in the blanks

a. The Trade and Merchandise Marks Act, 1958, came into force on _____

b. Trademark is defined in section _____of The Trademarks Act, 1999.

3. True or False

a. A trademark as a form of intellectual property is subject to transfer of ownership.

b. The term well-known trademarks has been used for the first time in the Trademarks Act, 1999.

8.6 REFERENCES

Law Relating to Trade Marks- Infringement and Allied Aspects by Razit Sharma (Regal Publications, New Delhi, 2016)

8.7 SUGGESTED READINGS

Intellectual Property Rights by B.L.Wadehra

Intellectual Property Rights by P. Narayanan

8.8 TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss different type of trade mark.

b. Explain the evolution of trade mark law.

Answers:

SAQs

1. Short Answer Question.

a. Refer 8.3.1

b. Refer 8.3.2

2. Fill in the blanks

a. 25 November, 1959.

b. 2(1)(zb)

3. True or False

a. True

b. True

TERMINAL QUESTIONS AND ANSWERS

a. Refer 8.3.8

b. Refer 8.3.6

UNIT-10

TRADEMARK LAW IN INDIA

STRUCTURE

9.1 INTRODUCTION

9.2 OBJECTIVES

9.3 SUBJECT

9.3.1 ENACTMENT OF THE TRADE MARKS ACT, 1999

9.3.2 SALIENT FEATURES OF THE TRADE MARKS ACT, 1999

9.3.3 REGISTRATION OF TRADEMARKS IN INDIA

9.3.3.1 REQUISITES FOR REGISTRATION

9.3.3.2 ABSOLUTE GROUNDS FOR REFUSAL OF REGISTRATION

9.3.3.3 RELATIVE GROUNDS FOR REFUSAL OF REGISTRATION

9.3.3.4 PROCEDURE OF REGISTRATION

9.3.4 INFRINGEMENT OF TRADE MARK

9.3.5 PASSING OFF

9.3.6 TRADE MARK DILUTION

9.4 **SUMMARY**

9.5 SAQS

9.6 REFERENCES

9.7 SUGGESTED READINGS

9.8 TERMINAL QUESTIONS AND MODEL ANSWERS

9.1 INTRODUCTION

The roots of India trademark law are to be found in the common law system of the United Kingdom. The UK Trademarks Registration Act was the first trademark legislation in UK which came into existence in 1875. It provided the registration of trademarks in England for the first time. After 1875, the Act of 1905 was enacted in U.K. which was repealed and replaced by the Act of 1938. Presently the law on trademarks is governed by the Trademarks Act, 1994 in United Kingdom. In the absence of statutory law only the common law protection was available to a trademark. The Trademarks Act, 1940 was the first complete code on the subject of trademarks in India. However, in 1889, the Indian Merchandise Marks Act was passed out but it was not a complete code in itself. The Act of 1940 was repeated and replaced by the Trade and Merchandise Marks Act, 1958 which consolidated the provisions of Trademarks Act, 1940, Indian Merchandise Marks Act, 1889 and certain trademark provisions contained in

IPC, Cr.P.C., Specific Relief Act and Sea Customs Act. The Trademarks Act, 1999 replaces the Trade and Merchandise Marks Act, 1958 and is a consolidated effort to bring the law on trademarks at par with international trade practices. It defines the 'trademark' as "a mark which is capable of being represented graphically and capable of distinguishing the goods or services of one person from those of others." There are various signs which may serve as trademarks. They may include words, letters and numerals, devices, title, name, coloured mark, audible signs, three-dimensional signs etc. Basically there are four types of trademarks namely product marks, service marks, collective marks and certification marks.

9.2 OBJECTIVES

After reading this unit you will be able to:

- Understand the backdrop for the enactment of The Trademarks Act,1999
- Describe the salient features of The Trademarks Act,1999
- Learn the registration of trademarks in India
- Explain infringement of trade mark
- Describe passing off
- Know about trade mark dilution
- Distinguish trade marks from passing off and trade mark dilution

9.3 SUBJECT

9.3.1 Enactment of The Trade Marks Act, 1999

In view of the extensive amendments in the Trade and Merchandise Marks Act, 1958, it was thought fit to repeal and re-enact the said Act incorporating the necessary changes. The Trademarks Bill, 1999 was passed by both the houses of Parliament and received the consent of the President on 30th December, 1999. This Act has amended and consolidated the law relating to trademarks and has provided for registration and better protection of trademarks for foods and services. One of the objectives of the Act is the prevention of the use of fraudulent marks.

9.3.2 Salient Features of the Trade Marks Act, 1999

The Trademarks Act, 1999 replaces the Trade and Merchandise Marks Act, 1958. The Act is a consolidated effort to bring the law at par with international practices.

(1) For the first time, this Act seeks to protect service marks as well. The services to which a trademark can be registered include that of advertising and business, insurance and finance, construction and repair, transport and storage, boarding and lodging, education and entertainment.

(2) The Trademarks Act, 1999 expands the scope of definition of a trademark to include graphic representation, shape, packaging and combination of colours and covers both goods and services.

(3) The scope of other terms like "mark", "collective mark", "goods", "registered trademark", "permitted use" have been expanded in tune with international practices.

(4) The jurisdiction of the courts is also affected with the formation of the appellate tribunal.

(5) The Act makes provisions for procedure for registration of trademarks easier by removing the earlier system of Parts A and B resgistrations.

(6) It provides for a single application for registration in more than one class and increases the period of registration and renewal from seven to ten years.

(7) The Act also provides for the classification of goods and services in conformity with recognized international classification of goods and services.

(8) The registrar of trademarks is vested with greater powers in the classification of goods and services.

(9) The scope of the trademark law has been expanded in the definition of "infringement". In this Act, infringement has been defined to include not just deceptively similar, but similar marks, similar goods and even goods not similar to those for which the trademark is registered.

(10) Trademark infringement under this Act is a cognizable offence. The police can act in cases where violation is likely to occur.

9.3.3 Registration of Trademarks in India

Provisions for registration of Trademarks were made for the first time in the Trade and Merchandise Marks Act, 1958. Trademarks which were already in use and also in respect of the trademarks which were proposed to be used were registerable under the former Act. Under the Trademarks Act, 1999, comprehensive registration of trademarks and service marks has been provided.

All marks used in the trade are not registrable. They may be registered or unregistered. The trademark law does not provide for the registration of all marks used in trade and business. The process whereby a trademark is entered on the Register of trademarks is referred to as registration. Only those marks which satisfy certain requirements are registrable.

The Trademarks Act, 1999 does not define the categories of marks registrable or the requisites for registration of a mark. It only defines what marks are not registrable. Those are absolute grounds for refusal under Section 9 and relative grounds for refusal of trademarks for registration. The registration offers prima facie evidence of ownership of trademark.

Whereas, in case of non-registration the user of trademark has to establish the prior use and passing off.

Registration of a trademark is not a compulsory requirement of the Act. But a user of such trademark which is not registered can prevent another person from its unauthorized use and can recover damages. But such user has to give much and sufficient evidence to prove his case and even to defend him. In case of a registered trade mark the registration certificate of trademark is a sufficient evidence to prove one's ownership. Registration of a trademark is a prima facie evidence of the validity of the trademark. The registration of a trademark provides the proprietor the exclusive right to use the trademark in relation to the goods or services in respect of which the trademark is registered. It also provides exclusive right to obtain relief in respect of which the trademark is registered and to obtain relief in respect of infringement of the trademark in the manner provided in the Act.

9.3.3.1 Requisites for Registration

The basic qualification for registrability of a mark is contained in the definition of trademark itself. The first requisite is that a mark should be a trademark within the meaning of Trademarks Act, 1999. The following are the conditions which emerge from the definition of trademark. A trademark must be:

(i) Capable of distinguishing the goods or services of one person from those of others.

Distinctive character emerges from the presence of the words. "Capable of distinguishing goods of one person from those of others…" in the definition of trademark in section 2(1) (zb) of the Trademarks Act, 1999.

The word 'distinctive character' in the Trademarks Act, 1999 has been substituted for the word 'distinctiveness' in the 1958 Act. The Trademarks Act, 1999 also recognizes that the distinctive character may be inherent or acquired. Distinctiveness has been understood as some quality in the trademark which earmarks the goods so marked as distinct from those of other products or goods. It may be inherent or acquired over a period of time.

(ii) Secondly the mark must be capable of being represented graphically.

9.3.3.2 Absolute grounds for refusal of registration

There are certain grounds provided in the Trademarks Act, 199 which refuses the registration of trademarks. These grounds are called absolute grounds and provided under section 9 of the said Act. These are following:

(i) Trademarks which are devoid of any distinctive character, that is to say, not capable of distinguishing the goods or services of one person from other are not registrable.

(ii) The trademark which show the kind, quality and quantity are also not registrable.

(iii) Trademarks which consist of marks or indication which have become customary in the current language are also not registrable.

However, a trademark shall not be refused registration if before the date of application, it has acquired a distinctive character as a result of the use or if it is already a well-known trademark.

(iv) A mark shall also be not registered if it is of such a nature which is to deceive public or cause confusion or which contains any matter that may hurt religious sentiments or is scandalous or contain certain obscene matter.

(v) The mark shall not be registered if it is prohibited under the Emblems and Names (Prevention of Improper Use) Act, 1950.

The Absolute grounds relate to inherent objections to distinctiveness and certain public interest objections.

(vi) A mark shall also not be registered as a trademark if it consists exclusively of the shapes of goods which result from the nature of goods themselves, or the shape of goods which is necessary to obtain a technical result or the shape which gives substantial value to the goods.

9.3.3.3 Relative grounds for refusal of registration

A trademark shall not be registered, if it is identical with an earlier trademark, or if it is similar to an earlier trademark and covers identical goods and services so as to cause confusion in the mind of the public.

Section 11 of the Trademarks Act, 1999 provides relative grounds for the refusal of registration. It provides that if a trademark has similarity or identity with an earlier well-known trademark but it is sought to be applied to a different category of goods, it will still not be registered. As it seeks to exploit a well-known brand for an unfair advantage or may harm the reputation of the earlier, well-known trademark.

If a trademark violates any law, in particular the law of passing off protecting an unregistered trademark, or the law of copyright, it is not registered. Additionally, the following categories of marks are also not registrable:

(i) A word which is commonly used and accepted name of an single chemical element or single chemical compound; and

(ii) A geographical name or surname or a personal name or any common abbreviation or the name of a sect, caste or tribe in India.

The Act provides for registration of same or similar trademark for more than one proprietor in case of honest, concurrent use, if in the opinion of Registrar it is proper to do so in the special circumstances.

Where the Proprietor of the trademark claims to be entitled to the exclusive use of any part of the trademark, he may apply to register the whole and the part as separate trademarks.

9.3.3.4 Procedure of Registration

In India an office of the Registrar of Trademarks has been established for the maintenance of the Trademark Registry. Controller General of Patents and Designs is also the Registrar of Trademarks. The Register of Trademarks contains the record of all registered trademarks, with names, addresses and description of proprietors and users, assignments and transmissions. It also contains the conditions and limitations and the name of registered users.

Any person who claims to be a proprietor of a trademark can apply to the Registrar of Trademarks for its registration. The application may be made in the name of an individual, partner of a firm, a corporation, any Government Department, a trust or joint applicants claiming to be the proprietor of the trademark for registration of a trademark the name of goods or services in relation to which the trademark is to be used as to be specified.

(i) Application

The person who claims to be the proprietor of a trademark used by him and desirous of registering it has to apply in writing to the Registrar in the prescribed manner. A single application may be made for registration of a trademark for different classes of goods and services. The fee payable for registration should be accompanied with the application as prescribed. Every such application is to be filed in the office of the trademarks Registry within whose territorial limits, the principal place of business of the applicant is situated. Subject to the provisions of this Act, the Registrar may refuse the application or may accept it absolutely or subject to amendments, modifications conditions or limitations. In the case of a refusal or conditional acceptance of an application, the Registrar shall record in writing the grounds for such refusal or conditional acceptance.

(ii) Advertisement of Application

Where an application for registration of a trademark has been accepted whether absolutely or subject to conditions. The Registrar shall as soon as may be often acceptance cause the application as accepted to be advertised in the prescribed manner.

(iii) Opposition and Registration

Any person may, within three months from the date of the advertisement, give notice in writing to the Registrar of opposition to the registration. The Registrar may increase the period not exceeding one month for applying to opposition. A copy of the notice of opposition is given by the registrar to the applicant to file a counter statement. The Registrar decides the issue giving both parties due hearing, if required or after considering their respective views. When the procedure for registration, including the opposition, if any, is satisfactorily complete, the Registrar is mandated to register the mark with effect from the date of application. After registration the trademark, the Registrar issues to the applicant a certificate in the prescribed form. The registration of a trademark is for a period of ten years but it may be renewed indefinitely on the payment of the prescribed renewal fees.

9.3.4 Infringement of Trade Mark

The term 'infringement' has not been defined in the Trademarks Act, 1999 however the Act explains the circumstances and conditions under which a registered trademark is infringed. Section 29 of the Trademarks Act, 1999 explicitly states what amounts to infringement or which acts constitute infringement of a trademark.

Infringement of trademark lies in violating the rights conferred by registration of a trademark. Sometimes the rights are absolute and sometimes they are subject to restrictive conditions and limitations duly entered on the register. Basically, following conditions are necessary to establish infringement of trademarks:

(i) The person must use the mark which is either identical with or deceptively similar to the registered trademark.

(ii) The goods or services in respect of which it is used must be covered by the registration.

(iii) The use made of the mark must be in the course of trade in a territory covered by the registration.

(iv) The use must be in such manner as to render it likely to be taken as being use as a trademark.

(v) The defendant should not be a permitted user which includes both registered user and unregistered user.

If use is likely to create confusion or deception in the mind of the consumer or is likely to have an association with the trademark, it is infringement. The goods or services which would form part of similar goods or services depend upon the interpretation by the courts. With regard to the comparison of trademarks a side by side comparison is inappropriate. The similarity of the marks must be determined by viewing them separately.

The courts determine the similarity of goods or services in relation to the nature of goods, trade channels and likelihood of association by the public. The scope of 'similar goods' is quite large than of 'same or same description' of goods. The word 'similar' would include all other goods including substitute goods except dissimilar or different goods. It is difficult to determine when similarity ends and dissimilarity begins. Use of identical or deceptively similar marks in the course of trade may cause infringement. The expression "deceptively similar" is defined in the Trademarks Act, 1999 as a mark if it so nearly resembles to a registered trademark to be likely to deceive or cause confusion. The infringement that deception or confusion has caused may arise as deception or confusion as to goods, deception or confusion as to trade origin or deception or confusion as to trade connection. The status does not require actual deception or confusion. In judging the similarity of signs, the courts sometimes emphasize the idea of the mark. That is, they do not focus on the detail of the mark so much as the general idea that it conveys.

The extension of right of trademark in relation to infringement from some goods to similar goods and even to dissimilar gods in respect of well-known marks is an effort to bring the law at par with international trade practices. To trade on the reputation of the reputed trademark is recognized as constituting infringement.

A suit for infringement of registered trademark must be filed in a District or High Court having the original jurisdiction to entertain such suits. The period of limitation for filing a suit for infringement of a trademark is three years from the date of infringement. Where the infringement is continuing one a new cause of action would arise every time an infringement occurs.

An infringement action is a statutory right depending upon the validity of registration and subject to other restrictions and limitations laid down under the Act. Where the defendant's trademark is identical with the plaintiff's mark, the court will not enquire whether the infringement is such as is likely to cause confusion. The test as to likelihood of confusion arises from the similarity of marks in infringement action.

Remedies are made available in case of infringement of trademarks. These are provided in order to compensate the loss suffered by the registered owner or user of the mark. Trademark law in case of registered trademarks offers certain remedies. A person who is aggrieved by infringement may obtain remedies as provided by the law through filing a suit in the court of law. The civil remedies available in case of violation of intellectual property rights are more or less similar to the remedies available for the violation of any other form of property.

The Trademarks Act, 1999 specifies the reliefs which the court may grant in a suit for infringement. The reliefs include:

(a) injunction which may be subject to such terms and conditions as the court thinks just and proper.

(b) damages or account of profits;

(c) delivery of the infringing labels for destruction or eraser.

Option is given to plaintiff to claim either of the reliefs or all and the court may grant all of them or any one or more of them in a certain matter depending upon several factors.

The relief of temporary injunction could be granted even ex-parte for any of the following matters:

(i) for discovery of documents.

(ii) for preserving goods or document or substantial evidence;

(iii) for restraining defendant to do an act which may adversely affect plaintiff's ability to recover damages, costs or any other pecuniary remedies which may be finally awarded to the plaintiff.

Further, it is provided in the Act that the court shall not grant relief by way of damages except nominal damages or on account of profits in the following situations:

1) In the case of infringement of certification or collective mark; or

2) If in a suit for infringement the defendant satisfies the court for the following matters. That at the time he commenced the use of mark, he was unaware that the plaintiff was

the registered user of such mark and when he came to know about the existence and nature of the plaintiff's right in the trademark he ceased to use the trademark. The use of trademark in relation to goods or services in respect of which it was registered.

a) Injunction

An injunction is the most effective remedy in preventing the infringement of registered trademark. It is specific order of the court directing the defendant to refrain from the act of infringement. It is the proper measure to prevent a person from encashing the reputation and goodwill earned by the other. The order of injunction may include an ex-parte injunction or any interlocutory order for discovery of documents, or preserving of infringing goods, documents or other evidence. This may also include an order to restrain the defendant from disposing of or dealing with his assets in a manner which may adversely affect plaintiff's ability to recover damages, costs or other pecuniary remedies which may finally be awarded to the plaintiff.

b) Damages

Damages is another kind of remedy made available to the registered proprietor or user of the trademark. Damages serve the purpose of compensating the proprietor or the user the loss that he has suffered due to unauthorized use. Damages could be awarded to compensate the legal injury or harm caused by the defendant to the plaintiff. The court decides the quantum of damages taking into consideration few things. These may be the reputation of the mark, the business of the proprietor and the length of the course of infringement etc. It is compensation paid to the plaintiff by the court irrespective of the actual amount of loss suffered by the plaintiff.

c) Account of Profits

The court may award damages along with accounts of profit as a measure of punishment. This penalty is imposed on the infringer for using the mark without the authorization of the proprietor or the user. The court may award accounts of profit to measure the actual benefit gained by the infringer due to the unauthorized use. The remedies for infringement of trademarks or passing off are same, as provided under the Trademarks Act, 1999. In India, the principles involving damages in trademark infringement are still evolving and the Indian courts are continuously adopting and developing newer interpretations.

9.3.5 Passing off

Like registered trademark, unregistered trademark is also the property of the holder or owner of the mark. It is protected by the common law action of passing off. For passing off action registration of trademark is not relevant. It is based on property in goodwill acquired by use of the mark. In case of passing off action the defendant's goods need not be the same as that of the plaintiff, they may be allied or even different. However, in the claim of infringement based on well-known trademarks there may be infringement even when the trademarks are used for different goods. In the case Durga Dutt Sharma v. N.P. Laboratories (AIR 1965 SC 980.) the difference between the infringement action and passing off has been laid. It was held

that an action for passing off is a common law remedy, being in substance an action for deceit i.e. passing off by a person of his own goods as those of another. But that is not the gist of an action for infringement. The action for infringement is a statutory remedy conferred on the registered proprietor of a registered trademark for the vindication of the exclusive right to use the trademark.

The basic underlying principle of passing off action is that no man is entitled to represent his goods as being the goods of another. There are three basic elements of the tort of passing off are the reputation or goodwill, misrepresentation or deception and damage. These are sometimes referred to as the "classical trinity". The first factor that needs to be proved in an action for passing off is goodwill in relation to the product or service in question. The second factor a plaintiff must have to prove is misrepresentation by the defendant to the public. It may be made by using the mark which is identical with or deceptively similar to or colourable imitation of the plaintiff's mark. The misrepresentation may also be made by using some of the features of the trademark by which the goods of the plaintiff are known to the consuming public.

In deciding whether the defendant's misrepresentation is deceptive, the court may take a number of factors into consideration. These include the following:

(i) strength of the public's association with the claimant's sign,

(ii) similarity of the defendant's sign,

(iii) proximity of the claimant's and defendant's fields of business,

(iv) characterstics of the market,

(v) intention of the defendant,

(vi) whether the defendant has made a disclaimer or attempt a parody or satire.

The third element that a claimant must prove to sustain a passing ff action is that he has suffered, or is likely to suffer, damage as a result of the defendant's misrepresentation. The Trademarks Act, 1999 does not affect the rights and remedies under common law of passing off. The term 'passing off' is not defined in the Trademarks Act, 1999 but it is referred to in section 27(2), 134(1)(c) and section 135 of the said Act. The act preserves all the rights and remedies with respect to passing off and specifically declares that nothing in this Act shall affect the rights and remedies in respect thereof.

The concept of passing off is basically a form of tort that has undergone several changes by the passage of time and due to judicial interpretations. At first it was restricted to the representation of the one person's goods as those of another. Later, it was extended in business and services. Subsequently, it was further extended to professions and non-trading activities. Today it is applied in many forms of unfair trading and unfair competition where the activities of one person cause damage or injury to the goodwill associated with the activities of another person or group of persons. The purpose of passing off action is to protect goodwill and to ensure that purchasers are not exploited. The Supreme Court defines "passing off" in Cadila

Healthcare Ltd. V. Cadila Pharmaceuticals Ltd. (AIR 2001 SC 1952) as species of unfair trade competition or of actionable unfair trading by which one person through deception attempt to obtain an economic benefit of the reputation which other has established for himself in a particular trade or business. The action is regarded as an action for deceit.

Passing off is of many varieties. With everyday improvement in the technology of the trade, infinite varieties of passing off can spring up. The setting of law of passing off is a result of increasing competition between the traders. This branch of law is ever expanding.

The changing trends in business and the impact of globalization have tremendous influence on expanding trademark protection beyond its traditional limits. The radical example of this trend is clearly visible in the concept of trademark dilution. Trademark dilution is a trademark law concept giving the owner of a famous trademark a right to forbid others from using that mark in a way that would lessen its uniqueness. Dilution is a basis of trademark infringement that only applies to famous trademark. Dilution protection extends to trademark uses that do not confuse consumers. Instead, dilution protection law aims to protect sufficiently strong trademarks from losing their singular association in the public mind with a particular product. Dilution is sometimes divided into two related concepts: blurring which blurs a mark from association with only one product to signify other products in other markets; and tarnishment, which is the weakening of a mark through unsavory or unflattering associations.

9.3.6 Trade Mark Dilution

The Trademarks Act, 1999 does not refer to the term ‘dilution’. It does not explicitly state about this form of infringement. Yet, the entire structure of section 29(4) is different from the earlier mark as the ‘likelihood of confusion’ test which is the essential basis of trademark law is not incorporated in relation to infringement of the kind it envisions.

A distinction is made between the trademark dilution and trademark infringement. Infringement occurs when someone other than a trademark owner uses the mark in a way that is to cause confusion whereas the customer confusion is not an essential element in trademark dilution. Dilution of trademark occurs when the use of the trademark impairs the marks’ distinctiveness irrespective of the use on similar goods or dissimilar goods and also irrespective of causing confusion in the minds of the consumers.

The protection under Indian law is for the famous and registered trademarks without the requirement of the confusion and even when the use is on dissimilar goods. This is quite different from other provisions which require confusion as an essential ingredient to constitute infringement. This is an extension of the infringement to protect famous trademarks.

9.4 Conclusion

The roots of Indian trademark law are to be found in the common law system of the United Kingdom. In the absence of statutory law only the common law protection was available to a trademark. The Trademarks Act, 1940 was the first complete code on the subject of trademarks. However, in 1889 the Indian Merchandise Marks Act was passed but it was not a complete code in itself. The Act of 1940 was replaced by the Trade and Merchandise Marks

Act, 1958 which consolidated the provisions of Trademarks Act, 1940, Indian Merchandise Marks Act, 1889 and some trademark provisions contained in IPC, Cr.P.C. and Sea Customs Act. The Trademarks Act, 1999 replaces the Trade and Merchandise Marks Act, 1958. The present act is a consolidated effort to bring the law at par with international practices.

9.5 SAQS

1. Short Answer Question.

a. Discuss the salient features of The Trade Marks Act,1999.

b.What is trademark dilution?

2. Fill in the blanks

a. The Trade Marks Act,1999 received the assent of the President on_____.

b. Section_____of The Trade Marks Act,1999, provides absolute grounds for the refusal of registration of trademarks.

3. True or False

a. One of the objectives of The Trade Marks Act,1999 is the prevention of the use of fraudulent marks.

b. Unregistered trade mark is protected by the common law action of passing off.

9.6 REFERENCES

Law Relating to Trade Marks- Infringement and Allied Aspects by Razit Sharma (Regal Publications, New Delhi, 2016)

9.7 SUGGESTED READINGS

Intellectual Property Rights by B.L.Wadehra

Intellectual Property Rights by P. Narayanan

9.8 TERMINAL QUESTIONS AND MODEL QUESTIONS

a. Discuss the registration of trademarks in India.

b. Explain the infringement of trademarks and the remedies available against it.

Answers:

SAQs

1. Short Answer Question.

a. Refer 9.3.2

b. Refer 9.3.6

2. Fill in the blanks

a. 30 December 1999

b. 9(nine)

3. True or False

a. True

b. True

TERMINAL QUESTIONS AND ANSWERS

a. Refer 9.3.3

b. Refer 9.3.4

UNIT: 11

DOMAIN NAME REGISTRATION

11.1 INTRODUCTION
11.2 OBJECTIVES OF DOMAIN NAME REGISTRATION
11.3 DOMAIN NAME REGISTRATION
11.4 INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS
11.5 SUMMARY
11.6 GLOSSARY
11.7 SAQS
11.8 REFERENCES
11.9 SUGGESTED READINGS
11.10 TERMINAL AND MODEL QUESTIONS

11.1 INTRODUCTION

As I think this techno-friendly world is a greatest gift to humane race since the dawn of human civilization. Its results are revolutionary as whole of world is in our bedroom via internet services. We are witnessing the utility of internet technology as before going into bed people do not forget to check their e-mails, social networking sites and websites for best shopping offers and chatting with kith & kins around the globe etc. These websites which we use for numerous purposes having their user-friendly addresses to help us connecting computers and people via internet. These addresses are easy to use and remember such as facebook.com and such address is domain name of websites that we use for connecting people. Therefore, domain name is the address of a web site. As they are easy to use and remember, domain names have become the business identifiers and even become trademarks for themselves such as gmail.com, yahoo.com, amazon.com, flipkart.com and sony.com.

Hence, a **domain name** is an identification link that defines a realm of administrative autonomy, authority or control within the internet. These domain names are formed by following the rules and procedures of the Domain Name System i.e. DNS. Any name registered in the DNS is a domain name. Domain names are meant to be used in various networking purposes and also for the purpose of application- specific naming and addressing. Domain names represent a company's Internet Protocol in the form of trademarks, either registered or unregistered, or words and phrases associated with the company.

Domain user friendly: Domain name is a personal sphere in terms of intangible property which provides a proprietorship over such technological efforts and without the permission of its owner no one entitled to encroach in another's right.

In this Unit we will analyse the registration of domain names for the purpose of internet services we avail day to day.

11.2 OBJECTIVE OF DOMAIN NAME REGISTRATION:

Study of this unit will help the students to understand that domain names serve to identify Internet resources, such as computers, networks, and services, with a text-based label that is easier to memorize than the numerical addresses used in the Internet protocols. A domain name may represent entire collections of such resources or individual instances. Individual Internet host computers use domain names as host identifiers, also called *host names*. The term *host name* is also used for the leaf labels in the domain name system, usually without further subordinate domain name space. Host names appear as a component in Uniform Resource Locators (URLs) for Internet resources such as web sites (e.g., en.wikipedia.org).

An important purpose of domain names is to provide easily recognizable names to numerically addressed Internet resources.

11.3 DOMAIN NAME REGISTRATION

Domain names represent a company's Internet Protocol in the form of trademarks, either registered or unregistered, or words and phrases associated with the company.

The right to use a domain name is delegated by domain name registrars, which are accredited by the Internet Corporation for Assigned Names and Numbers (ICANN), the organization charged with overseeing the name and number systems of the Internet. In addition to ICANN, each top-level domain (TLD) is maintained and serviced technically by an administrative organization operating a registry. A registry is responsible for maintaining the database of names registered within the TLD it administers. The registry receives registration information from each domain name registrar authorized to assign names in the corresponding TLD and publishes the information using a special service, the WHOIS protocol.

The first commercial Internet domain name, in the TLD *com*, was registered on 15 March 1985 in the name symbolics.com by Symbolics Inc., a computer systems firm in Cambridge, Massachusetts.

11.4 INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

Internet Corporation for Assigned Names and Numbers (ICANN) was established in October 1998. It is a non-profit private sector corporation formed by a board coalition of the Internet's business technical and academic communities.

All domain name disputes are subject to the ICANN Uniform Dispute Resolution Policy (UDRP), which was approved on 24th October 1999 and introduced on 1st December 1999. It provides for a quick and inexpensive arbitration process and allows for cancellation or transfer of the disputed domain name. A considerable number of cases have already been referred to and settled by various agencies functioning under ICANN.

The administration of a ccTLD is left to the specific country concerned. Example- The Administration of Domain Names within the .in (Indian) ccTLD is looked after by the NCST (National Centre for Software Technology) 2004. The IANA (Internet Assigned Names and Numbers) provides for a Root-Zone Who is Information Index by TLD Code. This Index enlists all the countries with this ccTLD. Like **Yahoo.com & Yahoo.co.in**

11.4 REGULATORY FRAME WORK:

Regulatory framework is two-fold. It may be categorized as

1. Uniform Dispute Resolution Policy (UDRP)

2. Indian Dispute Resolution Policy (INDRP)

1. UDRP PRINCIPLES:

Because of practical difficulties faced in pursuing traditional litigation in different jurisdictions, The UDRP was introduced and finally approved by ICANN. This was introduced on 24.oct.1999. The UDRP has been adopted by ICANN-accredited registrars in all gTLDs. The UDRP is a policy between the registrar and its customer and is included in the registration agreement for all ICANN-accredited registrars. Every registrant of a domain name has to agree to the Dispute Clause of the Terms and Conditions for the registration of a gTLD domain name. Therefore, once the complainant initiates the proceedings, the registrant must submit to such proceedings.

Paragraph 3 of the UDRP permits ICANN to cancel, transfer or otherwise make changes to domain name registrations in case they receive an order from a court or arbitral tribunal having competent jurisdiction requiring such action. Therefore, one may even option for a traditional litigation, get an order for transfer of domain name and then approach ICANN under Paragraph 3 of UDRP for transfer of domain name.

RULE 4(a) - The trademark owner must show-

1. Respondent's domain name is identical or confusingly similar to a trademark or service mark.

2. Respondent has no right or legitimate interest in respect of the domain name.
3. Respondent's domain name has been registered and is being used in bad faith.

2. INDRP PRINCIPLES:

The .IN registry has formulated the INDRP. The Policy is in line with internationally accepted guidelines, and the Indian Information Technology Act, 2000. The Policy sets out the terms and conditions to resolve a dispute between the registrant and the complainant, arising out of the registration and use of the .in Internet Domain Name. The INDRP Rules of Procedure describe how to file a complaint, how to respond to a complaint, the fees, communications, the other procedures etc. Para 4, INDRP is strikingly similar to Para 4 (a) of the UDRP and constitutes the same essential premises for filing a complaint. Para 6, INDRP = Para 4(b), UDRP - Bad Faith

11.5 DOMAIN NAME & INDIAN LAW

Domain name, though properly registered as per the requirements of ICANN, still it is subject to the Trademarks Act, 1999 if a person successfully proves that he has 'rights' flowing out of the Act. Rule 2 r/w Rule 4(k) which provides the parties have a right to agitate before a court of competent jurisdiction, irrespective of the declaration or decision to the contrary by the ICANN.

Thus, a contrary decision of an Indian Court of competent jurisdiction will prevail over the decision of ICANN.

Rights and Liability: The rights and liability to be adjudicated under the Trademarks Act, 1999 can be sub-divided under the following groups:

- Liability for infringement
- Liability for Passing off

Only passing off remedy is available in case of unregistered Trademarks under section 27 of TMA Act, 1999.

- CIVIL LIABILITY & CRIMINAL LIABILITY (Sec 106-109, 114,120, 140, 151)
- CRIMINAL LIABILITY
- Section 103 TMA- Penalty for applying false trademarks, trade descriptions, etc.
- Section 104- Penalty for selling goods or providing services to which false trade mark or false trade description is applied

11.6 SUMMARY:

The right to use a domain name is delegated by domain name registrars, which are accredited by the Internet Corporation for Assigned Names and Numbers (ICANN), the organization charged with overseeing the name and number systems of the Internet. In

addition to ICANN, each top-level domain (TLD) is maintained and serviced technically by an administrative organization operating a registry. A registry is responsible for maintaining the database of names registered within the TLD it administers. The registry receives registration information from each domain name registrar authorized to assign names in the corresponding TLD and publishes the information using a special service, the WHOIS protocol.

GLOSSORY:

1. ICANN - Internet Corporation for Assigned Names and Numbers.
2. UDRP- Uniform Dispute Resolution Policy
3. DNS- Domain Name System
4. TLD- Top-level domain

11.7 SAQS

1. Short Answer Questions:-

a) What domain name represent?

i) IP

ii) Country

b) What is DNS?

i) Domain Name System

ii) Dormant Narco System

2. Fill in the blanks:

a) All domain name disputes are subject to the ……..

b) A registry is responsible for maintaining the …….. of names registered within the TLD it administers

3. True and False:

a). Internet Corporation for Assigned Names and Numbers (ICANN) was established in October 1998.

(i)True, (ii) False

b). Any name registered in the DNS is a domain name.

(i)True, (ii) False

11.8 REFERENCES

1. https://www.domainindia.org/

2. https://www.hostindia.net/domains.php

3. https://en.wikipedia.org/wiki/Domain_name

4. www.wipo.int/amc/en/domains/decisions.htm

11.9 SUGGESTED READINGS

1. TRADE MARKS ACT, 1999

2. WIPO Guidelines

11.10 TERMINAL AND MODEL QUESTIONS

1. Explain procedure for registration of domain names.

2. Discuss various provisions under Trade Marks Act, 1999.

SAQS Answers:

1. a((i) b) (i)
2. a) ICANN b) Database
3. (a) True (b) True

Answer to Terminal Questions

(a) 11.3 (b) Trade Marks Act, 1999

UNIT-12
DOMAIN NAME DISPUTES & WIPO V. DATABASE

12.1 INTRODUCTION
12.2 OBJECTIVES
12.3 THE INTERFACE BETWEEN THE DOMAIN NAME SYSTEM AND INTELLECTUAL PROPERTY: THE WIPO PROCESS
12.4 THE MECHANICS OF THE WIPO PROCESS
12.5 SUMMARY
12.6 GLOSSARY
12.7 ANSWER TO CHECK YOUR PROGRESS/POSSIBLE ANSWERS TO SAQ
12.8 REFERENCES/BIBLIOGRAPHY
12.9 SUGGESTED READINGS
12.10 TERMINAL AND MODEL QUESTIONS

12.1 INTRODUCTION

Now having **domain name** has become smart business decision. A registered domain name enables the internet users to trace company's site on the web. The domain names of the company may be registered in any number of "top level domains" called "TLDs". Generic top level domains can be chosen " ("gTLDs"), like .com, .net, .org, .info etc or we can also make choice from specialized and restricted top level domains after qualifying the essentilas required like .aero for air travel and transport businesses, or .biz for commercial enterprises. Further we can also det our domain names registered under a "country code top level domain" ("ccTLD"), for example, .bg for Bulgaria, .cn for China, .ch for Switzerland.

The WIPO Arbitration and Mediation Center started offering domain name dispute resolution services in Uniform Domain Name Dispute Resolution Policy (UDRP) in December 1999. The services of the Center include administering second-level domain name disputes for generic Top-Level Domains (gTLDs) to which the UDRP is applicable. This Center is leading dispute resolution services provider under the WIPO-initiated, ICANN-mandated UDRP. The Center also administers disputes under a number of specific policies, adopted by individual gTLD registries.

12.2 OBJECTIVES: It has the following the objectives:-

The WIPO Arbitration and Mediation Centre is established to provide:

1. Time- efficient mechanisms to resolve internet domain name disputes.

2. Cost-efficient mechanisms to resolve internet domain name disputes.
3. Without the need for Court litigation.
4. This service is also focused to include the WIPO-initiated Uniform Domain Name Dispute Resolution Policy (UDRP), under which the WIPO Centre has processed over 39,000 cases.

12.3 THE INTERFACE BETWEEN THE DOMAIN NAME SYSTEM AND INTELLECTUAL PROPERTY: THE WIPO PROCESS

One consistent thread in the fabric of discussions and consultations concerning the management of the DNS has been the interface between domain names as addresses on the Internet and intellectual property or, more specifically, trademarks and other recognized rights of identity as they had existed in the world before the arrival of the Internet. It has become apparent to all that a considerable amount of tension has unwittingly been created between, on the one hand, addresses on the Internet in a human-friendly form which carry the power of connotation and identification and, on the other hand, the recognized rights of identification in the real world, consisting of trademarks and other rights of business identification, the developing field of personality rights, whether attaching to real or fictional characters, and geographical indications. One system—the DNS—is largely privately administered and gives rise to registrations that result in a global presence, accessible from anywhere in the world. The other system—the intellectual property rights system—is publicly administered on a territorial basis and gives rise to rights that are exercisable only within the territory concerned. In this respect, the intersection of the DNS and the intellectual property system is but one example of a larger phenomenon: the intersection of a global medium in which traffic circulates without cognizance of borders with historical, territorially based systems that emanate from the sovereign authority of the territory.

The tension that exists between the natures of the two systems has been exacerbated by a number of predatory and parasitical practices that have been adopted by some to exploit the lack of connection between the purposes for which the DNS was designed and those for which intellectual protection exists. These practices include the deliberate, bad faith registration as domain names of well-known and other trademarks in the hope of being able to sell the domain names to the owners of those marks, or simply to take unfair advantage of the reputation attached to those marks.

The IAHC recommendations took note of the tension that existed between domain names and intellectual property rights and included specific procedures designed to resolve conflicts between the two. The White Paper of the United States Government confined its specific recommendations to the desirable features of the management of the DNS and to the transition of that management to the new corporation. In respect of intellectual property, the White Paper contained the following passage:

"The U.S. Government will seek international support to call upon the World Intellectual Property Organization (WIPO) to initiate a balanced and transparent process, which includes the participation of trademark holders and members of the Internet community who are not trademark holders, to (1) develop recommendations for a uniform approach to resolving

trademark/domain name disputes involving cyberpiracy (as opposed to conflicts between trademark holders with legitimate competing rights), (2) recommend a process for protecting famous trademarks in the generic top level domains, and (3) evaluate the effects, based on studies conducted by independent organizations, such as the National Research Council of the National Academy of Sciences, of adding new gTLDs and related dispute resolution procedures on trademark and intellectual property holders. These findings and recommendations could be submitted to the board of the new corporation for its consideration in conjunction with its development of registry and registrar policy and the creation and introduction of new gTLDs."

Since the publication of the White Paper, WIPO has received the approval of its Member States to conduct, and has undertaken, the international process called for in the White Paper.

12.4 THE MECHANICS OF THE WIPO PROCESS

The WIPO Internet Domain Name Process comprised three stages.

The first stage was concerned with obtaining consensus on the issues to be addressed in the WIPO Process, the procedures to be used and the timetable in which the Process would take place. To this end a Request for Comments (WIPO RFC-1) was issued on July 8, 1998, with a deadline for receipt of comments of August 24, 1998. WIPO RFC-1 detailed as the terms of reference for the Process the three issues mentioned in the White Paper, namely, uniform dispute resolution procedures, a mechanism for the protection of famous marks and the evaluation of the effects on intellectual property rights of adding new gTLDs. It added a further term of reference, which WIPO considered to be appropriate in the context, namely, dispute prevention or practices in the administration of the DNS that are designed to reduce the incidence of conflict between domain names and intellectual property rights. Sixty-six governments, intergovernmental organizations, professional associations, corporations and individuals provided comments in response to WIPO RFC-1.

The second stage of the WIPO Process consisted of seeking comments and consulting on the issues defined after consideration of the comments received on WIPO RFC-1. To this end, a second Request for Comments (WIPO RFC-2) was issued on September 16, 1998, with a deadline for receipt of comments of November 6, 1998. Seventy-two governments, intergovernmental organizations, professional associations, corporations and individuals provided comments in response to WIPO RFC-2. Another important part of the second stage was the holding of regional consultation meetings in order to discuss and to receive comments on the issues under consideration. A total of 848 persons attended those regional consultation meetings

The third stage of the WIPO Process consisted of the publication, on December 23, 1998, of an Interim Report containing interim recommendations, which were, in turn, opened to comments, in the form of a third Request for Comments (WIPO RFC-3). By the date of the closure of the period for comments, March 19, 1999, 196 governments, intergovernmental

organizations, professional associations, corporations and individuals had provided comments in response to WIPO RFC-3. In addition, a second round of regional consultation meetings was held to discuss and to receive comments on the Interim Report. A total of 416 persons attended the second round of regional consultation meetings.

Modalities

In conducting the Process, WIPO has used three modalities to solicit participation from the widest international range of interested parties:

(i) WIPO established a website (*http://wipo2.wipo.int*) in English, French and Spanish as a primary vehicle for communication concerning the WIPO Process. In addition to the publication of information and documents concerning the WIPO Process, the website contained a facility for interested persons to register in order to receive communications relating to developments in the WIPO Process. Some 1,358 persons or organizations from 74 countries registered under the facility. The website also contained the text of all comments received in response to the three Requests for Comments issued (WIPO RFC-1, RFC-2 and RFC-3). It further established an open list server discussion forum. The list, which was not moderated, was intended to allow interested parties to discuss freely the widest possible range of questions arising in connection with the WIPO Process. Contributions to the list server were not formally considered as comments in response to RFCs. The number of subscribers to the list server, at the date of this Report, was 42.

(ii) Since the Internet is a global medium but access to it is not universal, WIPO also published in paper form each Request for Comments that it issued and sent these to the governments and industrial property offices of each of its member States, as well as to each non-governmental organization that was accredited as an observer with WIPO.

(iii) As mentioned above, WIPO has also sought to complement the Internet- and paper-based consultations with meetings organized in various venues throughout the regions of the world.

GUIDING PRINCIPLES IN THE FORMULATION OF RECOMMENDATIONS IN THE WIPO PROCESS

Before moving, in the remainder of the Report, to the issues considered in the WIPO Process and to the recommendations made in relation to those issues, the methodological principles which have guided the formulation of the recommendations should be made explicit. There are five such principles.

Recognizing the global nature of the Internet and the diverse range of purposes for which it is used, WIPO has endeavored to design a process which was international and which allowed for participation by all sectors interested in the use and future development of the Internet. While the mandate of WIPO relates to intellectual property protection, it is recognized that intellectual property cannot be considered in isolation in the context of a multifunctional global medium.

It is further recognized that the goal of this WIPO Process is not to create new rights of intellectual property, nor to accord greater protection to intellectual property in cyberspace than that which exists elsewhere. Rather, the goal is to give proper and adequate expression to the existing, multilaterally agreed standards of intellectual property protection in the context of the new, multijurisdictional and vitally important medium of the Internet and the DNS that is responsible for directing traffic on the Internet. The WIPO Process seeks to find procedures that will avoid the unwitting diminution or frustration of agreed policies and rules for intellectual property protection.

Conversely, it is not intended that the means of according proper and adequate protection to agreed standards of intellectual property should result in a diminution in, or otherwise adversely affect, the enjoyment of other agreed rights, such as the rights guaranteed in the Universal Declaration of Human Rights.

The central importance of the Internet and its capacity to serve the diverse interests of a rapidly expanding body of users is fundamental. A constant consideration has therefore been to ensure that the recommendations of the WIPO Process are practical and do not interfere with the functionality of the Internet by imposing unreasonable constraints on the high-volume and automated operations of domain name registration authorities.

The dynamic nature of the technologies that underlie the expansion and development of the Internet is also recognized. The WIPO Process also aimed to ensure that its recommendations do not in any way condition or affect the future technological development of the Internet.

THE SCOPE OF THE WIPO RECOMMENDATIONS: THEIR RELEVANCE TO ccTLDS

In the WIPO Interim Report, as well as in paragraphs 6, 7 and 8 above, a distinction is drawn between "open" TLDs (whether gTLDs or ccTLDs), in which there are no restrictions on the persons or entities who may register in them, and "restricted" TLDs, in which only persons or entities satisfying certain criteria, such as domicile in the relevant territory, may register domain names. In the Interim Report, it was also suggested that, while the recommendations of the WIPO process were limited to the gTLDs, they were potentially applicable to all open TLDs in which domain names may be registered without restriction and in which domain names may be bought and sol.

The comments made on the distinction drawn between "open" and "restricted" TLDs were divided. Certain parties were favorable to the distinction and considered it to be helpful as a means of indicating the functional similarities between gTLDs and ccTLDs and, in consequence, the similarity of the problems that may be encountered in respect of the interface between domain names and intellectual property rights. Others regarded the distinction as loose and lacking in definitional precision because of the variety of conditions that apply to registrations in the ccTLDs. Some parties, furthermore, considered the distinction to be dangerous, as it could be used for purposes other than solutions to problems arising out of the

interface between domain names and intellectual property rights and as a means of limiting the operations of ccTLDs. Our views on the purpose and usefulness of this distinction, after consideration of the comments received, are set out in the ensuing paragraphs.

The purpose of the distinction between "open" and "restricted" TLDs was to draw attention to the fundamental and crucial feature of the Internet as a global medium. A domain name registration, whether in a gTLD or a ccTLD, gives rise to a global presence. Many of the difficulties encountered in dealing with the interface between domain names and intellectual property rights arise from this fact. As pointed out above, intellectual property rights are territorially based and can be enforced only within the territory for which they are granted. A domain name registered in one country can (but does not necessarily) form the basis for activities in another country in which a territorially limited intellectual property right, granted under a legislatively sanctioned system, exists. The domain name can (but does not necessarily) lead to consumer confusion and deception and can (but does not necessarily) infringe the territorially limited intellectual property right. In consequence, the protection and enforcement of recognized territorially limited intellectual property rights can be jeopardized by activities originating under a domain name registration in another jurisdiction, which can create practical difficulties both in relation to the assessment of whether the intellectual property right is being violated and in relation to the enforcement of the intellectual property right against infringing activities.

Where restrictions apply to the persons or entities that can register in a TLD, those restrictions may (but do not necessarily) provide means for reducing the tension between domain names and territorially based intellectual property rights. For example, if one of the restrictions that is applied is domicile in the territory to which a ccTLD relates, the enforcement of any pertinent intellectual property right that is infringed by the domain name can be facilitated by the connection to jurisdiction, and thus amenability to legal process, that the restriction of domicile imposes. Or, for example, if the restriction applicable to the TLD defines carefully the type of entity that can register in the TLD, such as the requirement in .int that the registrant be an international organization, this restriction may operate to reduce the potential for conflict between domain names and intellectual property rights, since it removes the possibility for commercial entities to register in the domain. We do not recommend that restrictions be introduced in respect of TLDs, but merely draw attention to the fact that restrictions can have an effect on the relationship between domain names and intellectual property rights.

Where there are no restrictions that apply on registrations in a TLD, the potential for conflict between domain names and intellectual property rights is heightened. Functionally, in such a case, whether the TLD is a gTLD or a ccTLD, registrations of domain names can give rise to the same sort of problems concerning the interface between domain names and intellectual property rights. Our intention in drawing the distinction between "open" and "restricted" TLDs was simply to highlight the fact that the problems arising between domain names and intellectual property rights in unrestricted domains are similar. Given the

commonality of these problems, it follows that any comprehensive solution to the problems encountered between domain names and intellectual property rights would be most effective if applied in such a way as to recognize the global nature of the Internet and the global presence given by a domain name registration. The concept of a tax haven is well known. A ccTLD may be operated in such a way as to become an intellectual property piracy haven; that is, it may be administered outside the recognized system of international protection for intellectual property and, thereby, increase transaction costs for the enforcement of intellectual property rights and reduce the efficiency of the international intellectual property system.

WIPO recognizes that the recommendations contained in this Report are intended to apply only to the gTLDs. It also recognizes the international nature of the Internet and offers the recommendations contained in the present Report also for the consideration of those administrators of ccTLDs that wish to take cognizance of the responsibility that follows from the global presence given by a domain name registration. In response to the specific request of certain administrators of ccTLDs, Annex VIII contains detailed guidance on which recommendations in the present Report WIPO considers are potentially useful to ccTLDs, in order to ensure a comprehensive and efficient solution to the problems arising out of the interface between domain names and intellectual property rights. It is, obviously, for the administrators of the ccTLDs to consider whether or not they wish to adopt any of those recommendations.

12.5 SUMMARY:

WIPO established a website (*http://wipo2.wipo.int*) in English, French and Spanish as a primary vehicle for communication concerning the WIPO Process. In addition to the publication of information and documents concerning the WIPO Process, the website contained a facility for interested persons to register in order to receive communications relating to developments in the WIPO Process. Some 1,358 persons or organizations from 74 countries registered under the facility. The website also contained the text of all comments received in response to the three Requests for Comments issued (WIPO RFC-1, RFC-2 and RFC-3). It further established an open list server discussion forum. The list, which was not moderated, was intended to allow interested parties to discuss freely the widest possible range of questions arising in connection with the WIPO Process. Contributions to the list server were not formally considered as comments in response to RFCs. The number of subscribers to the list server, at the date of this Report, was 42.

(ii) Since the Internet is a global medium but access to it is not universal, WIPO also published in paper form each Request for Comments that it issued and sent these to the governments and industrial property offices of each of its member States, as well as to each non-governmental organization that was accredited as an observer with WIPO.

(iii) As mentioned above, WIPO has also sought to complement the Internet- and paper-based consultations with meetings organized in various venues throughout the regions of the world.

12.6 GLOSSARY

1. WIPO- World Intellectual Property Organisation
2. TLDs - Top level domains

12.7 SAQS

1. What WIPO stands for?
2. What is TDLs?

2**. Fill in the blanks:**

a) The WIPO Internet Domain Name Process comprised …… ……. stages.
b) The WIPO Arbitration and Mediation Centre is established to provide ……. ….. mechanisms to resolve internet domain name disputes

3. True and False:

1. WIPO established a website in English, French and Spanish as a primary vehicle for communication concerning the WIPO Process.

(a)True, (b) False

2. The domain names of the company may be registered in any number of "top level domains" called "TLDs.

(a)True, (b) False

12.8 References/Bibliography

http://www.wipo.int/amc/en/domains/

http://www.wipo.int/amc/en/center/bibliography/

12.9 Suggested Readings

Collection of WIPO UDRP Domain Name Panel Decisions by WIPO Arbitration Mediation Centre (Author)

12.10 Terminal and Model Questions

a) What is the procedure applied by WIPO in resolving the domain name disputes?

b) Discuss the powers, functions and jurisdiction of WIPO as an International Organisation to resolve internet related disputes?

SAQS Answers:

1. **(**a) World Intellectual Property Rights Organisation (b) Top level domains
2. (a) three (b) Cost-efficient
3. (a)True (b)True

Answer to Terminal Questions

(b)12.4 (b) 11.12.4-12.6

UNIT-13
PROTECTION OF DATABASE

13.1 INTRODUCTION
13.2 OBJECTIVES
13.3 PROTECTION OF DATABASES
13.4 MEANING OF DATABASE
13.5 NEED OF DATABASE PROTECTION
13.6 COPYRIGHT LAWS AND DATABASE DIRECTIVE
13.7 INTERNATIONAL EFFORTS FOR PROTECTION OF DATABASES
13.8 DATABASE DIRECTIVE
13.9 SUMMARY
13.10 GLOSSARY
13.11 SAQS
13.12 REFERENCES/BIBLIOGRAPHY
13.13 SUGGESTED READINGS
13.14 TERMINAL AND MODEL QUESTIONS
13.15 ANSWERS

13.1 INTRODUCTION

Database security is concerned with the use of broad range of information security controls to protect databases and potentially it includes the data, the database applications or stored functions, the database systems, the database servers and the associated network links against compromises of their confidentiality, integrity and availability. It involves various types or categories of controls, such as technical, procedural/administrative and physical. *Database security* is a specialist topic within the broader realms of computer security, information security and risk management.

13.2 OBJECTIVES:

After studying this unit student will easily examine the true motive behind making the machinery active to safeguard the public interest that is first requirement to ensure:

1. Protection against Unauthorized or unintended activity or misuse by authorized database users, database administrators, or network/systems managers, or by unauthorized users or hackers.
2. Protection against Data corruption and/or loss caused by the entry of invalid data or commands, mistakes in database or system administration processes, sabotage/criminal damage etc.

3. Protection against Malware infections causing incidents such as unauthorized access.
4. Protection against Design flaws and programming bugs in databases and the associated programs and systems, creating various security vulnerabilities.

13.3 PROTECTION OF DATABASES

Databases have been largely secured against hackers through network security measures such as firewalls, and network-based intrusion detection systems. While network security controls remain valuable in this regard, securing the database systems themselves, and the programs/functions and data within them, has arguably become more critical as networks are increasingly opened to wider access, in particular access from the Internet. Furthermore, system, program, function and data access controls, along with the associated user identification, authentication and rights management functions, have always been important to limit and in some cases log the activities of authorized users and administrators. In other words, these are complementary approaches to database security, working from both the outside-in and the inside-out as it were.

13.4 Meaning of Database

Database is a term with no precise definition. At its most generic, it is a collection of independent components, such as pieces of information, data, or works, arranged in a systematic or methodical way and which are individually accessible by electronic or other means. In the Indian Copyright Act there are no specific meanings attached to word databases or computer databases. Compilations including databases are defined as literary works. However, the Copyright, Designs and Patents Act, 1988 (CDPA) (the UK Act) defines a database as:

A collection of independent works, data or other materials which:

(a) are arranged in a systematic or methodical way; and

(b) are individually accessible by electronic or other means.

The U.S. Copyright Office has stated that "in the terminology of copyright law, a database is a compilation:

a work formed by the collection and assembling of preexisting materials or of data...". Furthermore, database is defined in Article 1(2) of the Eurpean Union Directive on Legal Protection of Database as a collection of independent works, data or other materials arranged in a systematic or methodical way and capable of being individually accessed by electronic or other means. A similar definition is contained in the Database Regulations. The significant elements in this definition are the references to "independent works, data or other materials", to arrangement in a "systematic or methodical" way, and to individual access 'by electronic or other means." Database protection applies to electronic and non-electronic databases.

Therefore, it needs to be noted that there are ambiguities and the concept of database is not always clearly understood. This ambiguity implies that there is scope to debate what the best means of protecting databases are.

The present debate regarding database protection can be viewed simply as an extension of the

historical clash between two conflicting models of copyright protection for compilations. The first model advocates that databases and factual compilations receive protection *per se*, i.e. without any showing of creativity or original authorship. Proponents of this theory, better known as the "sweat of the brow" or "industrious collection" doctrine, justify their position by arguing that protection should be extended to databases as a reward for the hard work and investment required to compile the facts and information contained in the database. Such a reward provides compilers with the incentive to develop new databases. Under this doctrine, protection extends to the otherwise unprotected facts contained in the compilation.

The second model of intellectual property rejects the notion that databases without any originality or creativity should be protected. Instead, Advocates of the second model would only extend copyright protection to the "expression" contained in the database, which is limited to the original selection, coordination, or arrangement of facts in the database — but not the facts themselves.

13.5 Need of Database Protection

Databases are useful collections of materials which consequently have value independently of their several items of content. They are often creative, and usually costly to compile, present and maintain. In the information society, they are of increasing economic significance.

Those who create databases, and those who invest in their development and maintenance, may reasonably expect to enjoy a return on their investments, but once a database has been made publically available securing a financial return from it is likely to be difficult, if not impractical, unless some form of property right is recognized in the database as such.

There is a view that taking a database and simply rearranging the data, creates something new and is not infringement of the original database copyright. The alternative view is that nowadays the data in a database are not placed in the computer memory in any particular order, and are simply available for retrieval so the former view implies an infringement of the original database.

Another view states that if there was no skill in selecting the individual items that go in a compilation or database and if there is no skill in the arrangement (no addition of keywords or indexing terms, simply a listing), then such a compilation should not justify copyright protection.[18]

Database manufacturers base their call for a new right on purely economic grounds, unlike existing forms of intellectual property that are grounded philosophically on the promotion of creativity, or "moral rights" in the European tradition. An author tends to maintain the copyright on a creative work even when he or she receives no remuneration for it (as in the case of this article) simply so other people won't change it and ship it around in garbled form. But database manufacturers have little reason to be concerned about how people use facts from the collections unless the manufacturers' markets are threatened.

The doctrines of "unfair competition" and "misappropriation" have long been used to protect database manufacturers, like other providers of goods and services, from losing business to competitors who become "free riders" by simply republishing the work that the original

manufacturer has taken so long to acquire.

While printed compilations have always been protected under copyright law, the protection of computer databases is fairly recent. As with all copyright law, copyright on databases protects only original works. As such, in most instances only the layout of the database is protected and not the inherent data itself. Prior to *Feist Publications* v. *Rural Telephone Service,* the general practice was for the courts to allow for database owners to argue that their efforts—by "sweat of the brow"— constituted reason enough to protect a database and its data under copyright. In *Feist,* however, the Supreme Court held that collections of facts could be granted only "thin" protection, that is, only the arrangement of the database would be protected. The underlying data would be part of the public domain if not novel as only originators may receive the benefits of copyright—"Only those who add to human knowledge may receive an exclusive right in what they added."

The problem for many scientific fields and the databases that service these fields is that they *only* deal with compilations of fact. Database owners, unsure of their rights, create long and complicated licenses in an effort to protect their investments from competitors. Academia, also unsure of its rights, counters with long and complex negotiations, to insure that it is not being roped into an unfair situation. In addition, many owners of scientifically important databases recoil into the absolute protection of trade secret laws, further hindering scientific research.

13.6 Copyright Laws and Database Directive

The European Union, in its efforts to harmonize and provide greater protection for intellectual property in data, passed the EU Database Directive, which allowed the information within a database to be protected under a new sui generis right. At a theoretical level, it would be pertinent to look at the reasons for copyright in general versus the copyrighting of databases in particular (in the form of a sui generis regime). The underlying rationale of copyright law in general has been to promote the making of creative works. While the idea behind copyright law is to provide an incentive to persons to produce creative works by granting them a monopoly over their product, the idea behind granting a sui generis protection to databases is more akin to a "real" property right (in the Lockean sense). So, we find that the rationale behind database protection is that information is treated as "property *per se*", as opposed to copyright in general, where it is limited to "property with a purpose". Under traditional copyright law, the right in intellectual property was purposive in nature, meaning that the association of the term "property" with cultural production was merely a fiction to grant protection to works produced by members of society.

13.7 International efforts for Protection of Databases

There are three main international agreements specifically dealing with collection or compilations which consequently impact on databases. They are the Berne Convention, TRIPS and the Copyright Treaty.

13.7.1 Berne Convention

The Berne Convention for the Protection of Literary and Artistic Works (the "Berne Convention"), guarantees quite minimal protection for compilations of literary and artistic works. Article 2(5) is restricted to collection of literary and artistic works rather than collection of information where the individual pieces of information were not in a form entitling copyright protection. The Berne Convention lists the works governed by it and since databases are not specifically mentioned, it could either fit into the list as a "collection" or "literary and artistic works".

13.7.2 TRIPS

TRIPS referred to databases and set up a framework for their protection. Its formula summarises and resolves the main controversies concerning database protection by using the fundamental approach that copyright in a database concerns its structure rather than its content. It is the mode of compilation that is protected and not the materials in question, which are assembled to create the database in question.

13.7.3 Copyright Treaty

Protection under this treaty is conditional upon the collection being selected or arranged in such a way as to constitute an intellectual creation. There are also more general provisions concerning copyright protection that have impact on legal protection of databases. These provisions are those concerning electronic dissemination of copyright material, *sui generis* protection, restrictions on manufacture, importation and distribution and use of devices that may be used to circumvent technological measures of protection in the contracting parties, providing protection for rights of management information to the owners of databases subject to copyright protection, etc.

13.8 Database Directive

13.8 .1 Copyright in the Compilation

This Directive seeks to bypass this difficulty i.e copyright in the compilation. The term database is defined in the Directive itself to mean a collection of independent works, data or other materials arranged in a systematic manner or methodological way and individually accessed by electronic or other means.[36] It also allows copyright in a database (as distinct from its contents) but only on the basis of authorship involving personal intellectual creativity. This is a new limitation so far as the common law countries are concerned. Intellectual judgment which is in some sense the author's own must go either into choosing contents or into the method of arrangement. For example, a selective dictionary will be a clearer case for copyright than the classified telephone dictionary.

Where this copyright arises, it is an author's right. Accordingly it will last for life plus 70 years; so a couple of youngsters should be on the production team. The author's right will be available under the Berne Convention to Americans and others entitled to national treatment. The right covers a comprehensive list of copying and like activities, and of public communication and similar steps.

13.8.2 Database Right

In addition to the copyright protection, there is a separate *sui generis* right given to the maker of a database (the investor who initiates it) against extraction or re- utilization of the contents of the database. Five points are important in this regard:

1. This right applies to databases whether or not their arrangement justifies copyright or not and whatever the position may be regarding copyright in individual items in its contents.
2. The focus upon contents, rather than organizational structure, is intended to give a right where the contents have been wholly or substantially taken out and rearranged (generally by a computer) so as to provide a quite different organisation to essentially the same material – a re-organisation which would not necessarily amount to infringement of copyright in the original arrangement. This, however, is not to discount the relevance of structural arrangements of the materials.
3. The database has to be a product of substantial investment. It cannot, for instance, consist merely of different works collected together on an ordinary music CD. In some European States, there were early decisions that website files of articles, news items or advertisements from the continuing numbers of a paper or magazine would constitute a database. The question has now become intertwined with the issue of whether the investment has been made in creating the information material, as distinct from construing the database.
4. The right protects "extraction" and/or "re-utilisation" of the whole or substantial part, evaluated quantitatively and qualitatively, of the contents. "Extraction" here means the permanent or temporary transfer of contents to another medium by any means or form; and "re-utilisation" means making the contents available to the public by any means. It is expressly stated that epealed and systematic extraction of insubstantial parts of a database can continue infringement.
5. The right lasts for 15 years from the completion of the database, or 15 years from its becoming available to the public during a 15 year period. However, further substantial investment in additions, deletions or alterations starts time running afresh. This means in effect that a living database has indeterminate protection, just as does a copyright textbook from regular editions containing revised material.

These agreements provide minimum standards of protection. Individual nations are at a liberty to provide higher level of protection. However, the effect of the EU Directive has been to standardise copyright protection for databases to the level prescribed in TRIPS and Copyright Treaty.

13.5 SUMMARY

Databases have been largely secured against hackers through network security measures such as firewalls, and network-based intrusion detection systems. While network security controls remain valuable in this regard, securing the database systems themselves, and the programs/functions and data within them, has arguably become more critical as networks are increasingly opened to wider access, in particular access from the Internet. The European Union, in its efforts to harmonize and provide greater protection for intellectual property in

data, passed the EU Database Directive, which allowed the information within a database to be protected under a new sui generis right. At a theoretical level, it would be pertinent to look at the reasons for copyright in general versus the copyrighting of databases in particular (in the form of a sui generis regime).

13.10 GLOSSARY

1. **TRIPS:** Trade Related Aspects of Intellectual Rights
2. **Database: I**t is a collection of independent components, such as pieces of information, data, or works, arranged in a systematic or methodical way and which are individually accessible by electronic or other means.

13.11 SAQS

1. SHORT ANSWER QUESTIONS:

(a) What do you mean by database?

(b) Briefly discuss Berne Convention.

2. FILL IN THE BLANKS:

(a) The underlying rationale of copyright law in general has been to promote the making of ……..

(b) ……referred to databases and set up a framework for their protection.

3 TRUE AND FALSE

(a) Databases are useful collections of materials which consequently have value independently of their several items of content.

(i) True (ii) False

(b) The objective of database protection is to ensure protection against Malware infections causing incidents such as unauthorized access.

(i) True (ii) False

13.12 REFERENCES/BIBLIOGRAPHY

1. Manupatra
2. Charles Brill, *Legal Protection of Collection of Facts*, 1 COMPUTER LAW REVIEW & TECHNOLOGY JOURNAL 2 (Spring 1998)
3. Section 2(o), Indian Copyright Act, 1957
4. Section 3A, Copyright, Designs and Patents Act, 1988 (CDPA) (as amended by regulations)
5. http://www.unc.edu/courses/2006spring/law/357c/001/projects/dougf/node1.html
6. Council Directive 96/9, March 11, 1996 O.J. (L 77) 20 (EC) (Jan. 29, 2011) http://europa.eu.int/ISPO/infosoc/legreg/docs/ 969ec.html; W.K Khong, *National and Inernational Developments on Copyright and Rights in Databases.*
7. *https://en.wikipedia.org/wiki/Database_security*.

13. 13 TERMINAL AND MODEL QUESTIONS

(a) Discuss International efforts for Protection of Databases?

(b) What is the role of Copyright Laws for the protection of Database?

13.14 ANSWERS

1. (a) 13. 4 (b) 13.8.1
2. (a) creative works (b) TRIPS
3. (a) True (b) True

ANSWERS OF TERMINAL QUESTIONS

(a) Refer 13.7 (b) Refer 13.6

UNIT-14
INDIAN LAW ON DATABASE

14.1 INTRODUCTION

14.2 OBJECTIVES

14.3 PROTECTION IN THE INDIAN SCENARIO

14.4 SUMMARY

14.5 GLOSSARY:

14.6 REFERENCES/BIBLIOGRAPHY

14.7 SUGGESTED READINGS

14.8 TERMINAL AND MODEL QUESTIONS

14.9 ANSWERS

14.10 ANSWERS TERMINAL QUESTIONS

14.1 INTRODUCTION

Data Protection refers to the set of privacy laws, policies and procedures that aim to minimise intrusion into one's privacy caused by the collection, storage and dissemination of personal data. Personal data generally refers to the information or data which relate to a person who can be identified from that information or data whether collected by any Government or any private organization or an agency.

The Constitution of India does not patently grant the fundamental right to privacy. However, the courts have read the right to privacy into the other existing fundamental rights, ie, freedom of speech and expression under Art 19(1)(a) and right to life and personal liberty under Art 21 of the Constitution of India. However, these Fundamental Rights under the Constitution of India are subject to reasonable restrictions given under Art 19(2) of the Constitution that may be imposed by the State. Recently, in the landmark case of Justice K S Puttaswamy (Retd.) & Anr. vs. Union of India and Ors., the constitution bench of the Hon'ble Supreme Court has held Right to Privacy as a fundamental right, subject to certain reasonable restrictions.

India presently does not have any express legislation governing data protection or privacy. However, the relevant laws in India dealing with data protection are the Information Technology Act, 2000 and the (Indian) Contract Act, 1872. A codified law on the subject of data protection is likely to be introduced in India in the near future.

14.2 OBJECTIVES

Though this world simplified our life style but it left certain anomalies in procurement of its object which resulted in involuntary disclosure of data. This can be analyzed from theses illustrations:

1. On every login to the e-mail account in the cyber cafes, the electronic trail of password remained left there unsecured.
2. On every use of credit card for purchasing purpose, the trail of brand preference, place of shopping etc. left behind.
3. On every login to internet, there left behind an electronic trail enabling website owners and advertising companies to get access to the preference and choices of the users by tracking them.
4. Employees are under seizing, as employers routinely use software to access employee's e-mail and their move.
5. Phone call signals of the police are easily tracked by the naxalites enabling them to know about the police plans.
6. Source code theft is the most preferred act of the miscreants.
7. Unsolicited e-mails are also a usual practice of gathering personal information of the users.
8. Movement across the web can be tracked by placing cookies and then retrieving such a way that allows building detailed profile of the user's interest, spending habits and lifestyle.
9. Through hacking, the hackers can whimsically alter anyone's account.

Thus it can be easily pointed out that how easy we are providing room to the miscreants to enhance and simplify their acts and how safe is it to avail the services of the digital world.

14.3 PROTECTION IN THE INDIAN SCENARIO

Database Protection under the Information Technology Act, 2000

In 1999 prompted by United Nations Commission on International Trade Laws Model Law on Electronic Commerce (MLEC) and notable developments in Asian countries such as Singapore and Malaysia, India commenced with providing a legal framework for internet activity. The Union Cabinet approved the bill on 13th May, 2000 and it was finally passed by both the houses of Parliament by 17th May, 2000. The Act received presidential assent on 9th June, 2000 as the Information Technology Act, 2000. India aims to regulate all digital activity through the Information Technology Act, 2000. However the database protections provided it to under the act is fairly limited.

Glimpses of Information Technology Act dealing with data protection:

S.R.	SECTIONS	**PROVISION UNDER INFORMATION TECHNOLOGY ACT, 2000**
1.	43	This section provides protection against unauthorized access of the computer system by imposing heavy penalty up to one crore. The unauthorized downloading, extraction and copying of data are also covered under the same penalty. Clause 'c' of this section imposes penalty for unauthorized introduction of computer viruses of contaminants. Clause 'g' provides penalties for assisting the unauthorized access.
2.	65	This section provides for computer source code. If anyone knowingly of intentionally conceals, destroys, alters or causes another to do as such shall have to suffer a penalty of imprisonment or fine up to 2 lakh rupees. Thus protection has been provided against tampering of computer source documents.
3.	66	Protection against hacking has been provided under this section. As per this section hacking is defined as any act with an intention to cause wrongful loss or damage to any person or with the knowledge that wrongful loss of damage will be caused to any person and information residing in a computer resource must be either destroyed, deleted, altered or its value and utility get diminished. This section imposes the penalty of imprisonment of three years or fine up to two lakh rupees or both on the hacker.
4.	70	This section provides protection to the data stored in the protected system. Protected systems are those computers, computer system or computer network to which the appropriate government, by issuing gazette information in the official gazette, declared it as a protected system. Any access or attempt to secure access of that system in contravention of the provision of this section will make the person accessed liable for punishment of imprisonment which may extend to ten years and shall also be liable to fine.
5.	72	This section provides protection against breach of confidentiality and privacy of the data. As per this, any person upon whom powers have been conferred under IT Act and allied rules to secure access to any electronic record, book, register, correspondence, information document of other material discloses it to any other person, shall be punished with imprisonment which may extend to two years or with fine which may extend to one lakh rupees or both.

14.3.1 Law of contract

These days' companies are relying on the contract law as a useful means to protect their information. The corporate houses enters into several agreements with other companies, clients, agencies or partners to keep their information secured to the extent they want to secure it. Agreements such as 'non circumvention and non-disclosure' agreements, 'user license' agreements, 'referral partner' agreements etc. are entered into by them which contains confidentiality and privacy clauses and also arbitration clauses for the purpose of resolving the dispute if arises. These agreements help them in smooth running of business. BPO companies have implemented processes like BS 7799 and the ISO 17799 standards of information security management, which restrict the quantity of data that can be made available to employees of BPO and call centers.

14.3.2 Indian Penal code

It imposes punishment for the wrongs which were expected to occur till the last decade. But it failed to incorporate within itself the punishment for crimes related to data which has become the order of the day.

14.3.3 The Personal Data Protection Bill, 2006

Upon the footprints of the foreign laws, this bill has been introduced in the Rajya Sabha on December 8th 2006. The purpose of this bill is to provide protection of personal data and information of an individual collected for a particular purpose by one organization, and to prevent its usage by other organization for commercial or other purposes and entitle the individual to claim compensation or damages due to disclosure of personal data or information of any individual without his consent and for matters connected with the Act or incidental to the Act. Provisions contained in this Act are relating to nature of data to be obtained for the specific purpose and the quantum of data to be obtained for that purpose. Data controllers have been proposed to be appointed to look upon the matters relating to violation of the proposed Act.

14.4 SUMMARY

On comparing the Indian law with the law of developed countries the proper requirement for the Indian law can be analyzed. Data are not of same utility and importance; it varies from one another on the basis of utility. So we require framing separate categories of data having different utility values, as the U.S have. Moreover the provisions of IT Act deal basically with extraction of data, destruction of data, etc. Companies cannot get full protection of data through that which ultimately forced them to enter into separate private contracts to keep their data secured. These contracts have the same enforceability as the general contract.

14.5 GLOSSARY:

MLEC: Model Law on Electronic Commerce
IT: Information Technology

1. **SAQS**

a) What is the meaning of Data protection?

b) When Information Technology Act was enacted?

2. **Fill in the blanks:**

The Constitution of India does not patently grant the ……to privacy.

Hon'ble Supreme Court has held …….as a fundamental right.

4. **True & False:**

1. Fundamental Rights under the Constitution of India are subject to reasonable restrictions.

a) True b) False

2. India is having a codified law on the subject of data protection.

a) True b) False

14.6 REFERENCES/BIBLIOGRAPHY

1. Manupatra
2. http://www.legalserviceindia.com/article/l37-Data-Protection-Law-in-India.html
3. *BHB* v. *Wm Hill*, [2004] E.C.R. I-1045, ECJ
4. Indira Carr, *India Joins the Cyber-Race: Information Technology Act, 2000*, 6 (4) INTERNATIONAL TRADE LAW AND REGULATION 122 (2000)
5. *Shyam Lal Paharia* v. *Gaya Prasad Gupta Rasal*, AIR 1971 All 58; *Gangavishnu Shrikisondas* v.
6. *Moreshvar Bapuji Hegishte*, I.L.R. 13 (Bom.) 358, 363 (1889); *Burlington Home Shopping Pvt. Ltd.*
7. *Eastern Book Company* v. *Desai*, AIR 2001 Delhi 185.

14.7 SUGGESTED READINGS

1. Information Technology Act, 2000
2. Article 10(2), Agreement on Trade-Related Aspects of Intellectual Property Rights (Annex 1C, Marrakesh Agreement Establishing the World Trade Organization) (Apr. 15, 1994), 33 I.L.M. 81 (1994); Article 2(5), Berne Convention for the Protection of Literary and Artistic Works (24th July, 1971), (amend. 28th September, 1979).
3. Praveen Dalal, Data Protection Law in India
4. Asian School of Cyber Laws, study material on Diploma course of Cyber Laws

14.8 TERMINAL AND MODEL QUESTIONS

1. Explain the effectiveness of Data protection Laws in India.
2. What is the role of IT Act in dealing with data protection?

14.9 ANSWERS

1. SAQS (a) Personal data privacy (b) 2000
2. (a) fundamental right (b) Right to Privacy
3. (1) True (2) False

14.10 ANSWERS TERMINAL QUESTIONS

(1) Referred 14.3 (2) Referred 14.3