

## CVTEE 101

### ICT Resources and Applications

#### **BLOCK- 01**

##### Unit 1

Fundamentals of Digital Computer- I [Definition of computer, components of computer, evolution, generation and classification of computers, Application of computers] Fundamentals of Digital Computer- II [Representation of data in computer: bits and bytes, computer memory, primary and secondary memory]

##### Unit 2

ICT Resources and Applications- An Introduction- I [Hardware Resources and peripherals]

##### Unit 3

ICT Resources and Applications- An Introduction- II [Software Resources and programming languages, installation and management]

##### Unit 4

ICT Resources and Applications- An Introduction- III [Miscellaneous tools and advance resources]

#### **BLOCK- 02**

##### Unit 5

Introduction to Text Editor (MS Word)- I [Starting MS-Word, Basic of MS-Word, Entering and saving text in a document, closing the MS-Word, opening of an existing document, copy and cut (move), working with a document, finding a particular pattern, Inserting objects into a document, etc.]

##### Unit 6

Introduction to Text Editor (MS Word)- II [bullet and numbering, undo and redo, working with fonts, page break, header and footer, page setup, Creating Tables, deleting a table, moving around the table, selecting a table, column, row and cell, entering, and deleting text, inserting and deleting columns and rows, merging and splitting cells.]

##### Unit 7

Introduction to Spreadsheet (MS Excel)- I [Starting of MS Excel, title bar, tabs, tool bar, formula bar, status bar, Exiting MS-Excel, working with Work Book, Creating a new Workbook, Working with cells, Merging of cells, Inserting a Row and Column, Deleting a row and column, saving a workbook, closing a workbook]

##### Unit 8

Introduction to Spreadsheet (MS Excel)- II [Working with functions & formulas Modifying worksheets with color, Analyzing data, sorting and Filtering Data, etc]

#### **BLOCK- 03**

##### Unit 9

Introduction to MS Power point- I [Starting MS-PowerPoint, Title bar, menu bar, tool bar, status bar, Different types of Views, Exiting MS- PowerPoint, Creating Slides, Creating a new Presentation, Working with slides, creating/Inserting new slides, Applying Design Templates, Applying custom animation, Applying slide transition, saving a presentation, running a presentation, closing a presentation, opening an existing presentation]

##### Unit 10

Introduction to MS Power point- II [Editing and formatting slides, Table, Charts & Graphs, tips to Create Professional Slide for Presentation.]

##### Unit 11

Fundamentals of Internet- I [Concept of Internet, Applications of Internet, Connecting to the Internet, Basic of Computer Networks, Understanding URL, Search Engines, The Internet as an Educational tool, etc]

##### Unit 12

Fundamentals of Internet- II [Introduction to Google Sheets- steps to use Google sheets, Introduction to Google docs- steps to use Google docs, Introduction to Google Slides- steps to use

Google Slides, Introduction to Google Drive- steps to use Google Drive. Introduction to Google forms- steps to use, Discussion forum, Blogs, Newsgroup, etc]

#### **BLOCK- 04**

Unit 13

Layered Architecture of Internet and protocols- I [History of Internet, Types of Network, Brief introduction to TCP/IP suite and OSI model]

Unit 14

Layered Architecture of Internet and protocols- II [IP addressing, IPv4 and IPv6, ISP, Internet governance, gateway, FTP, HTTP, HTTPS, SMTP, TCP/IP, etc.]

Unit 15

E-Content Development [Introduction, tools and techniques of e-content development, benefits and importance of e-content development, Introduction to basic HTML, Website planning for e-content/etutorials, etc.]

Unit 16

E-Governance [Governance: An Introduction, Importance and applications of e-governance, Benefits of E-governance, Types of Interactions in E-Governance, E-Governance Projects in India, Challenges of E-Governance in India]

#### **BLOCK- 05**

Unit 17

Fundamentals of image editing [image types, raster & vector images, image editing tools- a brief introduction of Adobe Photoshop/GIMP, copy right issues of images]

Unit 18

Fundamentals of info graphics [what is info graphics?, various open source info graphics tools, applications of info graphics, designing info graphics]

Unit 19

Introduction to Web development tools and technologies [what is web?, role of web/Internet in learning, brief description of web development tools, technologies, importance of automation software]

Unit 20

Educational Technology- Role of ICT [Brief introduction to educational technology, goals and tools of educational technology, popular models of TEL]

Unit 21

Models of Technology Enabled Learning and Social Media [Introduction to learning, types of learning as- traditional, virtual, online, blended, open and distance, correspondence, etc, role of social media in learning, challenges and issues of social media]

Unit 22

Report writing and document formation [Introduction, Writing the report: the essential stages, importance of document formation, Sample example of report writing]