MCA–04/PGDCA–04/M. Sc.(IT)–04

Fundamentals of Networking and Web Technology

Master of Computer Application/P. G. Diploma in Computer Application/Master of Science in Information Technology

(MCA–16/MCA–11, PGDCA–16/PGDCA–11, MSc.IT–16/MSc.IT–12)

First Semester, Examination, 2017

Time : 3 Hours   **Max. Marks : 70**

Note : This paper is of **seventy (70)** marks containing **three (03)** sections A, B and C. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section 'A' contains four (04) long answer type questions of fifteen (15) marks each. Learners are required to answer *two* (02) questions only.

1. Write brief about OSI Reference Model of networks.

2. Describe how the web browser communicates with the Web Server.

3. Design a webpage in Java Script to show the use of Array and functions.

4. What are List Tags ? Show their user with a web page example.

Section–B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of five (5) marks each. Learners are required to answer *six* (06) questions only.

1. Explain the various headers used in TCP data packet.

2. Write brief notes on the HTTP, FTP and SMTP protocol.

3. How can you incorporate Java Script into an HTML page ? Write an example.

4. Describe the various requirements that need to be satisfied by a computer network in detail.

5. Write short notes on peer to peer networks.

6. Explain the different ARQ mechanisms used to ensure reliable transmission of data in a network.

7. Write detailed notes on the concept of the Domain Name System.

8. What is an IP address ? Discuss the function of domain name system.

Section–C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (1) mark each. All the questions of this section are compulsory.

1. The main function of a browser is to :

   (a) Compile HTML

   (b) Interpret HTML

   (c) De-compile HTML

   (d) Interpret CGI programs

2. Spider is a ....

   (a) A program that crawls around the web and stores pages in search engines

   (b) Hacking software that spreads virally

   (c) Software that examines network vulnerabilities

   (d) A protocol for distributing large files

3. FTP does not use :

   (a) Two transfer mode

   (b) Control connection to remote computer before file can be transferred

   (c) User Datagram Protocol (UDP)

   (d) Authorization of a user through login and password verification

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4. .... is used to enable the use of active documents.

    (a) HTML

    (b) CGI

    (c) JAVA

    (d) All the above

5. ALIGN is :

    (a) A tag

    (b) The head

    (c) The body

    (d) An attribute

6. Web pages are uniquely defined using :

    (a) IP addresses

    (b) URL

    (c) Domain

    (d) File name

7. Which of the following services are available on the World Wide Web ?

    (i) Encryption

    (ii) HTTP

    (iii) HTML

    (iv) Firewalls

    (a) (i) and (ii)

    (b) (ii) and (iii)

    (c) (iii) and (iv)

    (d) (i) and (iv)

8. Internet uses :

   (a) Packet switching

   (b) Circuit switching

   (c) Telephone switching

   (d) Telex switching

9. The ownership rights as related to content on the web are governed under :

   (a) Copyright law

   (b) Patent law

   (c) Data protection law

   (d) Privacy law

10. Multipurpose Internet Mail Extension (MIME) was developed :

   (a) To support email messages containing text and video

   (b) To support email messages containing text, audio and video

   (c) To support email messages containing audio and video

   (d) To support text-based email messages