MCA–04/PGDCA–04/M.Sc.IT–04

Fundamentals of Networking and Web Technology

First Year, Examination, 2017

Time : 3 Hours   **Max. Marks : 80**

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to 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 nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Define OSI Reference Model with all seven layers and their working with example.

2. What is meant by Network Protocols ? How will you explain the working of HTTP, FTP, UDP and Telnet protocol and how will you use secure protocols in online network applications

3. What is WWW ? How will you use HTML and other internet languages to design website ? Write *ten* HTML tags with their uses.

4. Discuss various JavaScript methods and functions to design dynamic web pages. Also explain the role of web servers and domain name hosting in web application development.

Section–B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only. Answer of these questions must be restricted to two hundred fifty (250) words approximately.

1. What are the different types of websites ?
2. What are the connectionless and connection oriented services ? Explain.
3. What are the various types of Network topologies ?
4. What are different Transmission medium available for networking ?
5. Write the advantages and disadvantages of using TCP/IP.
6. What are LAN , WAN and MAN ? Explain.
7. Differentiate between XML and HTML with their uses in web designing.
8. What is IP address and IP addressing schemes ?

Section–C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. Computer Network is :
    (a) Collection of hardware components and computers
    (b) Interconnected by communication channels
    (c) Sharing of resources and information
    (d) All of the above

2.   What is a Firewall in Computer Network ?

(a)   The physical boundary of network

(b)   An operating system of computer network

(c)   A system designed to prevent unauthorized access

(d)   A web browsing software

3.   How many layers does OSI Reference Model have ?

(a)   4

(b)   5

(c)   6

(d)   7

4.   DHCP is the abbreviation of :

(a)   Dynamic Host Control Protocol

(b)   Dynamic Host Configuration Protocol

(c)   Dynamic Hyper Control Protocol

(d)   Dynamic Hyper Configuration Protocol

5.   IPV4 Address is :

(a)   8 bit

(b)   16 bit

(c)   32 bit

(d)   64 bit

6.   DNS is the abbreviation of :

(a)   Dynamic Name System

(b)   Dynamic Network System

(c)   Domain Name System

(d)   Domain Network Service

7. What is the meaning of Bandwidth in Network ?

   (a) Transmission capacity of a communication channels

   (b) Connected computers in the network

   (c) Class of IP used in network

   (d) None of the above

8. ADSL is the abbreviation of :

   (a) Asymmetric Dual Subscriber Line

   (b) Asymmetric Digital System Line

   (c) Asymmetric Dual System Line

   (d) Asymmetric Digital Subscriber Line

9. What is the use of Bridge in Network ?

   (a) to connect LANs

   (b) to separate LANs

   (c) to control Network Speed

   (d) All of the above

10. Router operates in which layer of OSI Reference Model ?

   (a) Layer 1 (Physical Layer)

   (b) Layer 3 (Network Layer)

   (c) Layer 4 (Transport Layer)

   (d) Layer 7 (Application Layer)

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