

M1-R4: Internet & Web Page Design (JAN 2019)

Max Marks: 100

M1-R4-01-19

DURATION: 03 Hrs

1. Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the “OMR” answer sheet supplied with the question paper, following instructions therein.

1.1 ARPANET Stands for

- a) Advanced Research Projects Agency Network
- b) Advance Research Project Agency Network
- c) Asymmetric Routing Project Advance Network
- d) None of Above

1.2 Which of the following layer is an end-to-end layer?

- A. Data Link Layer
- B. Transport Layer
- C. Network Layer
- D. Physical Layer

1.3 Router Operate at which layer ?

- a) Network
- b) Physical
- c) Data Link
- d) Transport

1.4 Flow Control is performed at which of the following layer?

- a) Network
- b) Physical
- c) Data Link
- d) None of the options

1.5 <a> tag in HTML is used for creating

- a) List
- b) Links
- c) Address
- d) None of the options

1.6 Which topology is used by FDDI

- a) Bus Topology
- b) Ring Topology
- c) Dual Ring Topology
- d) Mesh Topology

1.7 Which of the following is are special address

- i. 0.0.0.0
- ii. 127.0.0.1
- iii. 127.[anything]
- iv. All of the options

1.8 Connection oriented services at network layer in OSI model is called

- a) Datagram subnet
- b) Virtual circuit
- c) Packet switching
- d) None of the options

1.9 ISDN PRI has how many channels

- a) 22B+1D
- b) 23B+1D
- c) 24B+1D
- d) 25B+1D

1.10 The size of an ATM cell is

- a) 51 octets
- b) 53 octets
- c) 55 octets
- d) None of the options

(1x10)

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein.

- 2.1 The correct way to make an email link in HTML is TRUE
- 2.2 Infrared waves and Optical Fibre cable uses light waves for transmission of data. FALSE
- 2.3 ATM uses asynchronous time-division multiplexing, and encodes data into small, fixed-sized packets called cells. TRUE
- 2.4 HTTP is a stateless protocol. TRUE
- 2.5 Bridges do not forward LAN Broadcast at all. FALSE
- 2.6 Subnet Mask is made by setting network bits to all “0”s and setting host, bits to all “1”s. FALSE
- 2.7 Using HTML, you can create user defined tags. FALSE
- 2.8 ISDN prescribes two levels of service-BRI and PRI TRUE
- 2.9 HTML is case sensitive. FALSE
- 2.10 href stands for hypertext reference. TRUE

3 Match words and phrase in column X with the closed related meaning of word(s)/phrase(s) in column Y. Enter your selection in the “OMR” answer sheet supplied with the question paper, following instructions therein.

| | X | | Y |
|-----|---|----|----------------|
| 3.1 | Represented in hexadecimal format (E) | A. | Physical Layer |
| 3.2 | Character Stuffing (K) | B. | Multicast |
| 3.3 | Every node is connected to every other node (L) | C. | 32 bits |
| 3.4 | One to many communication (B) | D. | Broadcast |
| 3.5 | Standard network protocol used to transfer computer files between a client and server (J) | E. | MAC Address |
| 3.6 | Total Internal Reflection (I) | F. | 48 bits |

| | | | |
|------|---------------------------|----|-------------------|
| 3.7 | Bit Stuffing (C) | G. | Twisted Pair Wire |
| 3.8 | Numbered List in HTML (M) | H. | SLIP |
| 3.9 | Length of MAC Address (F) | I. | Optical Fibre |
| 3.10 | Modulation (H) | J. | FTP |
| | | K. | PPP |
| | | L. | Mesh |
| | | M. | Ol |

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Choose the most appropriate option, enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein.

| | | | | | |
|----|----------|----|----------------|----|-----------------|
| A. | Port | B. | Interpreted | C. | Error Detecting |
| D. | FDDI | E. | EMI | F. | Tree Network |
| G. | Layering | H. | Broadcast | I. | Class D |
| J. | OLX | K. | Infra red wave | L. | Compiled |
| M. | Flipkart | | | | |

- 4.1 (G) concept used in Networking Models.
- 4.2 (A) address are used at Transport layer.
- 4.3 Fault tolerance feature is provided in (D)
- 4.4 Twisting in Twisted pair is done for the purposes of canceling out (E) **Electronic Magnetic Interference** from external sources.
- 4.5 (K) is used in night vision equipment when there is insufficient visible light to see.
- 4.6 CRC is (C) technique.
- 4.7 Ethernet supports (F) transmission.
- 4.8 (J) is an example of C2C E-Commerce Model.
- 4.9 JavaScript is a high-level, dynamic and (B) programming language.
- 4.10 Multicasting support is provided in (I) Address.

PART-TWO

5

- A) Explain Packet Switching Technology. How is it different from Circuit Switching ?
- B) What is an IP Address ? Highlight the differences between IPv4 and IPv6



C) What is the role of a switch in a network ? Also explain its working.

6.

A) What is a Meta Search Engine? How is it different from a search engine ?

B) List the protocols, devices and unit of data at each of TCP/IP layers.

C) Highlight upon the importance of DNS. Also explain Domain name system structure.

7.

A) Explain the network layer function of TCP/IP Model

B) Create an HTML page to demonstrate target attribute in Frames.

C) What is cryptography ? Explain the difference between Private Key Cryptography and Public Key Cryptography

8.

A) Create an HTML page to demonstrate a Clickable image.

B) Explain the basic types of Firewalls

C) Differentiate between POP3 and IMAP4

9.

A) What is Client Server architecture ? Give three examples of Client Server Applications.

B) Write short noted on

(i) Structure of an email

(ii) FTP

(iii) Java Script

(iv) Electronic Commerce

(v) PPP

