

**Roll No.**

**Total No. of Pages : 04**

**Total No. of Questions : 14**

**B.Sc (IT) (Sem.-5)**

# COMPUTER NETWORK

**Subject Code : BSIT(05)-503**

**Paper ID : A0319**

**Time : 3 Hrs.**

**Max. Marks : 75**

### INSTRUCTIONS TO CANDIDATES :

1. SECTION-A will be compulsory and have 20 questions of 1 mark each.
2. SECTION-B will have 8 short answer type questions of 5 marks each, out of which candidate will have to attempt any 5.
3. SECTION-C will have 5 long answer type questions of 10 marks each, out of which candidate will have to attempt any 3.

## SECTION-A

## 1. Multiple Choice Questions :

- A) A ..... is a TCP name for a transport service access point.
  - a) port
  - b) pipe
  - c) node
  - d) none of the mentioned
- B) Data communication system spanning states, countries, or the whole world is .....
  - a) LAN
  - b) WAN
  - c) MAN
  - d) None of the mentioned
- C) In TDM, slots are further divided into .....
  - a) Seconds
  - b) Frames
  - c) Packets
  - d) None of the mentioned
- D) The sharing of a medium and its link by two or more devices is called .....
  - a) Fully duplexing
  - b) Multiplexing
  - c) Both Fully duplexing and Multiplexing
  - d) Duplexing

- E) Multiplexing is used in .....
- a) Packet switching
  - b) Circuit switching
  - c) Data switching
  - d) Packet & Circuit switching
- F) A local telephone network is an example of a ..... network.
- a) Packet switched
  - b) Circuit switched
  - c) Both Packet switched and Circuit switched
  - d) Line switched
- G) What are the Methods to move data through a network of links and switches?
- a) Packet switching
  - b) Circuit switching
  - c) Line switching
  - d) Both Packet switching and Circuit switching
- H) ..... allows you to connect and login to a remote computer
- a) Telnet
  - b) FTP
  - c) HTTP
  - d) None of the mentioned
- I) Which one of the following is not correct?
- a) telnet is a general purpose client-server program
  - b) telnet lets user access an application on a remote computer
  - c) telnet can also be used for file transfer
  - d) none of the mentioned
- J) MAC address is of
- a) 24 bits
  - b) 36 bits
  - c) 42 bits
  - d) 48 bits

**True/False :**

- K) Ethernet is an example of a baseband system found on many LANs.
- L) All protocols are routable.
- M) ICMP (Internet Control Message Protocol) reports on the success or failure of data delivery.
- N) The most popular method for connecting nodes on a network is circuit switching.
- O) Modern Ethernet networks are based on the star topology.
- P) In data networks, the task of directing information efficiently to the correct destination is handled by connectivity devices, primarily switches and routers.
- Q) ATM is a WAN technology that functions in the Qsata Link layer.
- R) In CIDR, conventional network class distinctions do not exist.
- S) The MIME standard replaces SMTP.
- T) By default, the 802.11 standard offers substantial security.

**SECTION-B**

- 2. What is Multiplexing? Explain the various techniques of multiplexing in detail.
- 3. Explain the design issue of Data Link layer in detail.
- 4. What is Transmission Media? Explain the wireless media in detail.
- 5. What is the advantage of token passing protocol over CSMA/CD protocol?
- 6. Write note on various fields in Ethernet frame format.
- 7. What is the advantage of designing TDM?
- 8. What is remote access? Explain with example.
- 9. What are composite signal? Explain with example.

### SECTION-C

10. a) What are different cables used for networking?  
b) Compare features of Bridges and Switches
11. Compare and contrast OSI and TCP/IP reference model?
12. What are the different types of transmissions media?
13. a) Discuss IP issues with examples.  
b) Discuss the concept of virtual LAN's with help of example.
14. a) Discuss various roles a protocol has to play.  
b) Explain the characteristics of STDM.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**