

Dr. Babasaheb Ambedkar Open University
Term End Examination January – 2026

Course	: MCA	Date	: 19/02/2026
Subject Code	: MCA-204	Time	: 03:00pm to 05:15pm
Subject Name	: Computer Networking	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. What is OSI Reference Model? Explain features, principles and different layers of OSI Reference Model in detail.
2. What is Transmission Media? Explain characteristics of media in detail.
3. Explain fiber-optic cable and comparisons of various guided media in detail.
4. What is Network Topology? List out them and explain it in detail.
5. Explain Circuit Switching and Packet Switching and give difference between them.

Section B

Answer the following (Attempt any four) (20)

1. Explain Components of Computer Networking.
2. Write a note on Internet Standards.
3. Explain TCP/IP Protocol Stack.
4. What is wireless media? Explain comparison of different wireless media.
5. Write a note on Contention.
6. Explain Message Switching in detail

Section C

Part – A (Multiple Choice Questions) (10)

1. _____ types of network expands within the boundary of a city or town.
A LAN B MAN
C WAN D PAN
2. SMTP, POP3 and IMAP4 are types of _____ server protocol.
A Database Server B File Server
C Game Server D Mail Server
3. _____ defines the maximum data transfer rate of a network or Internet connection.
A Bandwidth B waveform
C Signal D Latency
4. IETF Stands for _____.
A Internet Electronic Task Force B Internet Engineering Time Force
C Internet Engineering Task Force D Internet Electronic Time Force

5. Each network computer is connected to every other computer in the same network is called _____.

A Tree topology	B Star topology
C Ring Topology	D Mesh topology
6. IEEE working group developed 802.11 for

A Logical Link Control Sublayer	B Medium Access Control Sublayer
C Wireless Personal Area Network	D Wireless Local Area Networks
7. TMD Stands for _____.

A Time-division multiplexing	B Task-division multiplexing
C Transmission-define multiplexing	D Transition dividers multiple
8. IP addresses are represented by a 32-bit unsigned binary value.

A 16 bit	B 32 bit
C 64 bit	D 128 bit
9. _____ basic channel access methods.

A Contention	B Polling
C Token Passing	D All of these
10. MAC stands for _____.

A Media Address Control	B Media Access Control
C Mode Access Control	D Mode Address Control

Part – B (Do as Directed)

(10)

- 1 What is Computer Network ?
- 2 What is Bit Rate?
- 3 What is Ports?
- 4 What is Modem?
- 5 What is Polling?
- 6 Web server is also known as application server. (T/F)
- 7 Network layer divides the packet into the frame. (T/F)
- 8 If the header checksum does not match the contents, the datagram is discarded. (T/F)
- 9 A gateway acts as the meeting point or go between point between 2 different networks, using different protocols. (T/F)
- 10 Demand priority is the media access protocol definite in the IEEE 802.12 draft standard. (T/F)
