

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

Course	: BCA	Date	: 11-07-2026
Subject Code	: BCAOL-302 / BCAMA-302	Time	: 11:30am to 01.45pm
Subject Name	: Introduction to Computer Network	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain components of computer networking and benefits of network.
2. Write a note on IEEE 802.2 with its operations modes.
3. What are microwaves? Explain its types with characteristics, advantages & disadvantages.
4. Write a note packet switching with its advantages & disadvantages.
5. What is OSI Model? Explain application and role of every layer in brief.

Section B

Answer the following (Attempt any four) (20)

1. What are servers? Explain its types in short with its importance.
2. Write a note on organizations & their contributions to establish the standards of internet.
3. What is Fibre Optic Cable? Explain its core structure with advantages.
4. What are the reasons which causes transmission impairment active during transmission?
5. Explain the functions of physical layer in OSI Model.
6. Differentiate CSMA CD Vs. CSMA CA.

Section C

Part – A (Multiple Choice Questions) (10)

1. Which network covers a small geographical area like a college or office?
A. MAN B. WAN
C. LAN D. PAN
2. Which device forwards data using IP addresses?
A. Hub B. Router
C. Bridge D. Repeater
3. Which service is mainly used for transferring files over a network?
A. HTTP B. FTP
C. SMTP D. TELNET
4. Which signal has continuous values?
A. Binary Signal B. Digital Signal
C. Analog Signal D. Optical Signal
5. How many layers are there in the TCP/IP Model?
A. 5 B. 6
C. 7 D. 8
6. IEEE 802 standards are mainly related to _____.
A. Database Systems B. Computer Networks
C. Operating Systems D. Programming Languages

7. Which transmission medium provides the highest data transmission speed?
- A. Twisted Pair Cable B. Coaxial Cable
C. Optical Fiber Cable D. Telephone Cable
8. TCP stands for _____.
- A. Transfer Communication Protocol B. Transmission Control Protocol
C. Transmission Computer Process D. Transport Connection Program
9. Which topology uses a central connecting device?
- A. Bus B. Ring
C. Star D. Mesh
10. Which switching method establishes a dedicated communication path before data transfer?
- A. Packet Switching B. Circuit Switching
C. Message Switching D. Frame Switching

Part - B (Do as Directed)

(10)

1. State full form of SMTP.
2. State full form of FTP.
3. What is the full form of OSI?
4. Name the protocol used to transfer files over the Internet.
5. _____ topology uses a central connecting device.
6. The OSI Reference Model consists of _____ layers.
7. _____ cable provides the highest data transmission speed.
8. Hub works in full-duplex mode. State True or False.
9. TCP/IP is a protocol suite. State True or False.
10. Router is used to connect two different networks. State True or False.
