

Total No. of Printed Pages: 02

SUBJECT CODE NO: - BB-2357**FACULTY OF SCIENCE AND TECHNOLOGY****B.Sc. (CBCGS) (Pattern 2022) T.Y SEM V****Examination November / December 2025****Computer Science-XVIII B Basic Computer Network****[Time: 1:30 Hours]****[Max. Marks: 40]**

Please check whether you have got the right question paper.

N. B

- 1) All questions are compulsory.
- 2) All questions carry equal marks.
- 3) Illustrate your answer with suitable labelled diagram.

Q1

1. What is OSI reference Model? Explain the functions of its layers.

10**OR**

2. Distinguish between Guided & Unguided transmission Media.

05

3. Explain the different function of Network layer of OSI model.

05**Q2**

1. What is transmission Mode? Explain the different types of transmission mode with neat Diagram.

10**OR**

2. Explain the different data encoding techniques.

05

3. Explain with suitable diagram TCP protocols.

05**Q3 Short Notes on any TWO of the following:-****10**

- 1) IPV6
- 2) Client server Network Architecture
- 3) Flow Control
- 4) SMTP

Q4 MCQs:**10**

1. The OSI _____ layer is implemented mainly by software.
 - a) application
 - b) session
 - c) presentation
 - d) all of the above
2. The network layer protocol of internet is _____.
 - a) Ethernet
 - b) internet protocol
 - c) hypertext transfer protocol
 - d) none of the mentioned
3. _____ is a network that covers geographic areas that are larger, such as districts or cities.
 - a) LAN
 - b) MAN
 - c) WAN
 - d) None of these

4. A collection of interconnected networks is called as _____.
a) internet b) intranet c) topology d) interface
5. Which of the following are transport layer protocols used in networking?
a) TCP and FTP b) UDP and HTTP
c) TCP and UDP d) HTTP and FTP
6. The data link layer takes the packets from _____ and encapsulates them into frames for transmission.
a) network layer b) physical layer
c) transport layer d) application layer
7. A device operating at network layer is called _____.
a) Router b) Equalizer c) Bridge d) Repeater
8. A class E address starts with the _____ bit(s).
a) 0 b) 10 c) 1110 d) 1111
9. TCP is _____.
a) Connection-oriented b) Reliable
c) Both a & b d) None of these
10. OSI stands for _____.
a) open system interconnection b) operating system interface
c) optical service implementation d) open service Internet

