

**BACHELOR OF COMPUTER APPLICATION
FIFTH SEMESTER
COMPUTER NETWORKS
BCA-501**

**SET
A**

[USE OMR FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

1X20=20

Choose the correct answer from the following:

1. Which of the following provides long distance transmission of data?
a. LAN
b. MAN
c. WAN
d. None of these
2. Unidirectional communication is possible in
a. Half duplex mode
b. Simplex mode
c. Full duplex mode
d. None of these
3. Example of first computer network is
a. ARPANET
b. CNNNET
c. DELNET
d. INET
4. Which of the following works as traffic controller?
a. HUB
b. Switch
c. Router
d. Repeater
5. Which of the following boost-up the weak signal?
a. HUB
b. Switch
c. Router
d. Repeater
6. Broadcasting means
a. Sending messages privately
b. Sending messages publicly
c. Both (a) & (b)
d. None of these
7. If the period of a signal is 100 ms. What is its frequency in kilohertz?
a. 10^{-1} KHz
b. 10^{-2} KHz
c. 10^{-3} KHz
d. 10^{-4} KHz
8. If a signal does not change at all, its frequency is
a. Zero
b. Unity
c. Infinite
d. None of these
9. Which of the following switching technique provides a dedicated path between the sender and receiver?
a. Packet switching
b. Message switching
c. Circuit switching
d. All of these

10. Which of the following transmits data in the form of pulses of light?
 - a. Fiber optic cable
 - b. Co-axial cable
 - c. Twisted pair cable
 - d. All of these
11. The physical layer concerns with
 - a. process to process delivery
 - b. application to application delivery
 - c. bit-by-bit delivery
 - d. none of the mentioned
12. Which is the part of data link layer?
 - a. LLC
 - b. MAC
 - c. Both a and b
 - d. None of these
13. Which of the following protocol sends electronic mail to the receiver's end?
 - a. FTP
 - b. SMTP
 - c. POP3
 - d. Both (a) and ©
14. The data unit in the TCP/IP layer is called a
 - a. Message
 - b. Segment
 - c. Datagram
 - d. Frame
15. The data link layer takes the packets from ----- and encapsulates them into frames for transmission
 - a. physical layer
 - b. transport layer
 - c. network layer
 - d. application layer
16. What are email security services?
 - a. Confidentiality
 - b. Authentication
 - c. Non-repudiation of origin
 - d. All of the above
17. The full form of Malware is ____
 - a. Malfunctioned Software
 - b. Multipurpose Software
 - c. Malicious Software
 - d. Malfunctioning of Security
18. Which is not an objective of network security?
 - a. identification
 - b. authentication
 - c. access control
 - d. lock
19. Unsolicited Bulk E-mails (UBI) are
 - a. SMS
 - b. MMS
 - c. Spam emails
 - d. Malicious emails
20. ____ is the method for keeping sensitive information in email communication & accounts secure against unofficial access, loss, or compromise.
 - a. Email security
 - b. Email hacking
 - c. Email protection
 - d. Email safeguarding

(Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. What do you mean by topology of network? Explain various types of network topology with the help of diagrams. 10
2. Define Computer Network. Differentiate between LAN, MAN and WAN. 10
3. a. What is switching technique? Discuss circuit switching technique with the help of diagram. 7+3=10
b. Define Transmission media. What are the types of transmission media?
4. Write short notes on the followings: 5+5=10
 - a. Router
 - b. Repeater
5. What do you mean by protocol? Explain the various types of protocol that we can access to the internet. 10
6. What do you mean by TCP/IP reference model? Explain the various layers of TCP/IP reference model in details along with a diagram. 10
7. Explain the various key issues of network security in details along with an example. 10
8. What do you mean by firewall? How many types of firewalls are there? Explain all of them with an example. 10

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