

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2022 ONLY)

22UBC5E1

REG.NO. :

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2024**  
**COURSE NAME: B.C.A** **MAXIMUM MARKS: 50**  
**SEMESTER: V** **TIME : 3 HOURS**

**PART - III**  
**NETWORKS**  
**SECTION – A**

(10 X 1 = 10 MARKS)

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

(K1)

1. A collection of hyperlinked documents on the internet is called \_\_\_\_\_  
a. World Wide Web (WWW) b. E-mail system c. Mailing list d. Hypertext markup language
2. "Parity bits" are used for \_\_\_\_\_  
a. Encryption of data b. To transmit faster c. To detect errors d. Encryption of data
3. What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?  
a. Unshielded twisted pair b. Optical fiber c. Coaxial cable d. Microwave
4. The location of a resource on the internet is given by its?  
a. Protocol b. URL c. E-mail address d. ICQ
5. Which software prevents the external access to a system?  
a. Firewall b. Gateway c. Router d. Virus checker

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

(K2)

6. Expand TCP/IP.
7. Give the use of light waves.
8. Define Congestion.
9. Define Authentication.
10. Expand SMTP.

**SECTION – B**

(5 X 3 = 15 MARKS)

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Compare LAN, MAN and WAN.  
(OR)  
b) Interpret TCP/IP model in detail.
12. a) List the various transmission media and explain them.  
(OR)  
b) Examine the Sliding window protocol in detail.
13. a) Discuss the routing algorithms in detail.  
(OR)  
b) Explain the elements of Transport protocols.

(CONTD.....2)

- 14.a) Assess the synchronization points in session layer.  
(OR)  
b) Explain the concept of Data compression in presentation layer.
- 15.a) List the file transfer protocols and explain them.  
(OR)  
b) Write a detailed note on Network Security.

**SECTION – C**

**(5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.  
(K4 (Or) K5)**

16. a) Determine the OSI reference model in detail.  
(OR)  
b) Compare Connection-oriented services with connectionless services.
17. a) Examine the Error detection and correction with an appropriate example.  
(OR)  
b) Discuss Communication satellites in detail.
18. a) Analyze the Congestion control algorithms in detail.  
(OR)  
b) Explain the Quality of service in the transport layer.
- 19.a) Determine the Session Protocol Data Unit in detail.  
(OR)  
b) Compare the concept of Encryption with Decryption.
- 20.a) Inspect E-mail in detail.  
(OR)  
b) Interpret HTTP in detail.

\*\*\*\*\*