B.M.S COLLEGE FOR WOMEN
BENGALURU – 560004

III SEMESTER END EXAMINATION – JAN/FEB- 2024

B.C.A. - COMPUTER NETWORKS
(NEP Scheme 2021-22 onwards F+R)

Course Code: BCA3DSC08 **QP Code: 3031**
Duration: 2 ½ Hours **Max. Marks: 60**

Instructions: Answer all the sections

SECTION-A

Answer any TEN questions. Each question carries 2 marks. **(10x2=20)**

1. Define Computer Networks.
2. Define Protocol. Why is it need?
3. What is Parity Checking.
4. List the protocols of Data Link Layer.
5. Define bit stuffing.
6. Differentiate point-to-point and multi-point communication.
7. Define error. List the types of errors.
8. Mention the advantages of TCP.
9. Define the following:
   a. Switching
   b. IP address
10. What is ALOHA.
11. Define file sharing and file transfer.
12. Abbreviate SMTP, POP, IMAP and MIME.

SECTION-B

Answer any SIX questions. Each question carries 5 marks. **(6x5=30)**

13. Explain the types of transmission modes.
14. Define Topology. Explain any 4 types of Network Topologies.
15. Explain CSMA with its schemes.
16. Explain FDMA, TDMA.
17. Differentiate IPv4 and IPv6 addressing.
18. Compare datagram and virtual circuit.

19. What is FTP? Write its advantages and disadvantages.
20. Explain Token Bucket algorithm with a neat diagram.

SECTION-C

Answer any ONE question. Each question carries 10 marks. (10x1=10)

21. Explain OSI Reference model in detail with a neat diagram.
22. With neat diagram, explain different guided transmission media.
23. Write short notes on:
    a. Quality of Service parameters (2M)
    b. Techniques involved in QoS (2M)
    c. Leaky Bucket Algorithm (3M)
    d. Implementation of QoS (3M)

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