VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
MCA I Year II - Semester (Main/Backlog) Examinations, June/July-2016
Computer Networks

Time: **3** hours

Max. Marks: **70**

Note: Answer ALL questions in Part-A and any FIVE questions from Part-B

Part-A (10 X 2=20 Marks)

1. Define a Protocol and Standard.
2. Brief about line coding.
3. List error detection and correcting codes.
4. Briefly write about Ethernet.
5. Distinguish between logical address and physical address.
6. Define routing.
7. What is multiplexing, briefly explain.
8. Define Quality of Service (QoS).
9. What is World Wide Web (www)?
10. Define an e-mail service.

Part-B (5 X 10=50 Marks)
(All bits carry equal marks)

11. a) How do the layers of the Internet model correlate to the layers of the OSI model?

    b) Illustrate with diagrams various direction of data flow schemes used in networks.

12. a) Distinguish between forward error correction versus error correction by retransmission.

    b) Discuss the HDLC protocol.

13. a) Explain the IPv4 header in detail.

    b) Write about Open Source Path First (OSPF) and Border Gateway Protocol (BGP).

14. a) Distinguish between uni-cast and multicast routing protocols.

    b) Compare the TCP and UDP protocols.

15. a) Discuss about e-mail architecture and services.

    b) What are the two main categories of DNS messages? Explain briefly.

16. a) Why are protocols needed in computer networking?

    b) Compare wireless LAN with wired LANs.

17. Write short notes on any **two** of the following:
    a) IPV6
    b) Congestion Control
    c) FTP

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