POKHARA UNIVERSITY

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) Define Local Area Network. Discuss on any five applications of Computer Network.   7

    b) Why TCP/IP is called implementation model? Explain in brief about OSI model.   8

2. a) What are different guided Medias? Explain each in brief.   7

    b) What are the main functions of Data Link Layer? Discuss any two flow control mechanisms.   8

3. a) Discuss on CRC error detection and Hamming code.   8

    b) What are the special IP addresses used in Classful addressing? A multi-national company is granted a site ip172.16.0. 15. Design an IP table with its subnets.   7

4. a) Define routed and routing protocol. Explain Distance Vector routing algorithm.   8

    b) What do you understand by port addressing? Explain TCP header format.   7

5. a) How does congestion occur in computer network? What are the different mechanisms used in closed loop congestion control?   8

    b) Discuss on protocols HTTP and SMTP.   7

6. a) What is cryptography? Write and explain the RSA algorithm.   8

    b) Discuss on Virtual Private Network with its security issues.   7

7. Write short notes on: (**Any two**)   2×5

    a) Peer to Peer Model

    b) Frame Relay

    c) Proxy Server