

FULL MARKS: 70

TIME - 3 HRS

Answer any six questions including Question 1 which is compulsory

1. Answer all the following questions 2x10
- (a) How can you verify a digital signature?
 - (b) What is multicast socket?
 - (c) How forwarding is different than routing?
 - (d) What is server side scripting?
 - (e) What is the meaning of "in" in the URL "http://www.goidirectory.nic.in"?
 - (f) How FTP is different from HTTP?
 - (g) What is the utility of datagram?
 - (h) Explain each term in the phrase **10 Base 5**.
 - (i) The address 11011101 11011111 11111110 11011110 belongs to which class?
 - (j) Differentiate between socket and port?
- 2.(a) Explain the TCP/IP protocol suite and how it is different from OSI model. 5
- (b) Explain datagrams and virtual circuits with respect to packet switching network. 5
- 3.(a) How remote logging works in terminal networking? 5
- (b) Explain RSA algorithm. Find the ciphertext of VSS. 5
- 4.(a) Describe the important functions of network layer. What do you mean by subnetting? 5
- (b) Explain about three way handshaking procedure for establishing TCP connection 5
- 5.(a) Give a detailed description of token ring protocol. Why would this protocol be inefficient if a LAN had a huge perimeter? 5
- (b) Discuss the Internet addressing mechanism. How DNS is useful? 5
- 6.(a) Explain how reliable delivery of entire message is done in transport layer. 5
- (b) Give a detailed description of public key cryptosystems. 5
- 7.(a) Why there is an upper limit on modem speed? Explain voice grade modem and cable modem. 5
- (b) Explain the working procedure of frame relay. 5
8. Write short notes on 10
- a) Repeater b) Hub
 - c) Bridge d) Network throughput