

N.B.: (1) Question No. 1 is compulsory.

(2) Attempt any three questions out of remaining five.

(3) Figures to the right indicate full marks.

(4) Assume suitable data if required and mention the same in answer sheet.

Q.1 Solve following (20)

- (a) Explain how TCP use for flow control.
- (b) Explain the concept of fragmentation in Internet communication.
- (c) Comment on network space and host space used in interworking layer.
- (d) List two functions of each layer of TCP/IP protocol suite.

Q.2 (a) Explain in detail FTP and TFTP. (10)

(b) Explain with neat diagram transition states of DHCP. (10)

Q.3 (a) Explain Karn's algorithm in detail. (10)

(b) Explain the connection establishment, data transfer and connection termination phases of TCP. (10)

Q.4 (a) Explain in detail the SIP. (10)

(b) Explain in detail RTP packet format. (10)

Q.5 (a) Explain the different error reporting messages in ICMP with message format. (10)

(b) Explain with neat diagram IP header format. (10)

Q.6 (a) What is the need of digitizing of Audio and Video in Internet communication?

Explain Video Compression (MPEG) in detail. (10)

(b) Discuss the different techniques that can be used to improve the quality of service (QoS). (10)
