

Time: 3 hours

Max. Marks: 60

All questions carry equal marks

SECTION – A

Answer the following: (05 X 10 = 50 Marks)

- 1 Explain briefly about each layer in the OSI reference model and how this model is different from the TCP/IP model.

OR

- 2 (a) Explain briefly about hierarchical networks.
(b) Illustrate the working of CRC mechanism with a suitable example.

- 3 (a) What is the mechanism of sliding window flow control?
(b) Give a brief note on virtual circuits.

OR

- 4 Define broadcasting. What are the various broadcasting algorithms? Explain in detail.

- 5 (a) Give brief description about the transport service primitives.
(b) Describe in detail about the internet work fragmentation.

OR

- 6 (a) Explain briefly about the flow control in transport layer.
(b) What is crash recovery? Discuss in detail.

- 7 (a) Explain briefly the process of key distribution in networks.
(b) Give brief description about the virtual terminal protocols.

OR

- 8 (a) Explain the need of security for the messages in network.
(b) Explain the approach of digital signature using public-key cryptography.

- 9 (a) Describe in detail about the history of ISDN.
(b) Explain briefly about the networking devices.

OR

- 10 Write short note on the following:
(a) ISDN services.
(b) Internetworking.

SECTION – B

(Compulsory Question)

01 X 10 = 10 Marks

11 Case study:

What is the hamming distance for each of the following code words:

- (a) d(10000,01000).
(b) d(10101,10010).
(c) d(1111,1111).
(d) d(0000,0000).
(e) d(11100,01001).
