16172
2 Hours / 50 Marks

Instructions –
(1) All Questions are Compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data, if necessary.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. a) Attempt any THREE of the following: 12
   (i) Draw neat block diagram of flat bed scanner and explain its working.
   (ii) Compare LAN, WAN and MAN.
   (iii) Describe data encapsulation.
   (iv) Define cache memory. Explain different level of cache memory.

b) Attempt any ONE of the following: 6
   (i) What is preventive maintenance? Give its importance. Explain different type of preventive maintenance.
   (ii) Draw RS - 232 signal interface and explain the signals.
2. **Attempt any FOUR of the following:** 16
   a) Compare between OSI and TCP/IP reference model. (4 points)
   b) List advantages of LCD monitor over CRT monitor.
   c) Define:
      (i) Blackout
      (ii) Brownout
      (iii) Surge
      (iv) Spikes
   d) Write fault finding and troubleshooting procedure of peripherals of PC.
   e) State the meaning and functions of ARP and FTP.
   f) Compare peer - to - peer N/W and client - server N/W.

3. **Attempt any FOUR of the following:** 16
   a) Compare TCP and UDP with respect to:
      (i) Speed
      (ii) Reliability
      (iii) Acknowledgement
      (iv) Security
   b) With the help of diagram. Explain working of UPS.
   c) Draw the construction of opto-mechanical mouse and explain its working.
   d) What is network topology? Explain star and Ring topology with its advantage (any 2)
   e) Explain working of CD-ROM drive.
   f) List important features of routers used in Computer Network.