16117 2 Hours / 50 Marks

Seat No.

- **Instructions**: (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. (A) Attempt any THREE:

12

- Define the terms with reference to LCD Monitor:
 - (i) Resolution
 - Refresh Rate (ii)
 - (iii) Response time
 - (iv) Dot pitch
- (b) State four preventive maintenance measures to be taken for maintenance of scanner.
- State four features of DDR2 and DDR3 RAM. (c)
- (d) State the functions of the following layers of OSI Reference Model.
 - (i) Data link layer
 - (ii) Transport layer
 - (iii) Network layer
 - (iv) Application layer

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(B) Attempt any ONE:

6

- (a) State the step-by-step procedure for installation of TCP/IP Protocol and configuring the same.
- (b) State the function of:
 - (i) Hubs
 - (ii) Switches
 - (iii) Routers
 - (iv) Bridges
 - (v) Gateways
 - (vi) Firewalls

2. Attempt any FOUR of the following:

16

- (a) Draw the block diagram of a flatbed scanner and state the function of each block.
- (b) State two problems related to laser printer with their symptoms. State preventive maintenance measures for Laser printer.
- (c) What is POST? Explain. What is the meaning of the following BIOS beeps in IBM PCs.
 - (i) 1 long beep and 1 short beep.
 - (ii) 1 short beep.
- (d) Describe IP Address classes with suitable examples.
- (e) Compare TCP and UDP. (4 points)

3. Attempt any TWO of the following:

16

- (a) Draw a neat sketch and describe the construction of CDROM. Describe the recording mechanism in CD-ROM.
- (b) State the pin description of various pins in RS 232 serial interface.
- (c) With the help of a neat sketch describe the construction of fibre optic cable and state four advantages over electrical cables.
