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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

1. A) Attempt any three:
   a) Explain architecture of Intel chipset 945G with diagram.
   b) With the help of diagram explain working of UPS.
   c) Explain the preventive maintenance of printers.
   d) Draw the 20 pin ATX power connection with color code and describe the signals.

B) Attempt any one:
   a) Describe peer to peer and client-server networks.
   b) Compare between OSI and TCP/IP reference model (6 points).

2. Attempt any four:
   a) Explain BIOS with its any 3 functions.
   b) Explain construction of DVD.
   c) Describe data encapsulation.
   d) Explain passive matrix LCD with diagram.
   e) List any four advantages of optical mouse.

P.T.O.
3. Attempt any two:
   
a) What is network topology? Explain star and bus topology with its advantages (any 2).

b) Explain keyboard, hard disk, mouse and scanner related problems.

c) Explain following term:
   i) Subnet masking
   ii) ARP
   iii) FTP
   iv) IP address classes.

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