

17428

14115

3 Hours / 100 Marks

Seat No.

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- 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) Preferably, write the answers in sequential order.

Marks

1. a) **Attempt any SIX of the following :** **12**
- (i) Define the following terms –
 - (1) Cache Hit
 - (2) Cache Miss.
 - (ii) What is FAT ? List two features of FAT 32.
 - (iii) Write any four advantages of LCD display over CRT display.
 - (iv) List any four advantages of Laser Printer over Dot Matrix Printer.
 - (v) Give any four disadvantages of Ink-jet Printer.
 - (vi) Define the terms Blackout and Surge.
 - (vii) Give any four features of USB.
 - (viii) List any four features of firewire.

P.T.O.

- b) **Attempt any TWO of the following :** **8**
- (i) Explain conventional memory and extended memory.
 - (ii) With neat diagram describe working principle of Plasma display.
 - (iii) Draw the block diagram of Video Accelerator card and explain its working.
2. **Attempt any FOUR of the following :** **16**
- a) Explain North Bridge and South Bridge Architecture with neat diagram.
 - b) What is formatting ? Explain low level and high level formatting.
 - c) Describe and write pre-compensation with its use.
 - d) Explain working of CD-ROM drive with block diagram.
 - e) Compare Passive matrix and Active matrix LCD display. (Any four points).
 - f) List any four advantages of optical mouse.
3. **Attempt any FOUR of the following :** **16**
- a) List any four features of BIOS.
 - b) Differentiate between CRT and LCD displays (Any four prints).
 - c) Explain the sequence of events in RS-232 communications with signals.
 - d) Name any two hardware tools and software tools used for trouble shooting of PC.
 - e) Write Active, Passive maintenance procedures.
 - f) Give the test sequence of post.

- 4. Attempt any FOUR of the following :** **16**
- a) Write working principle of Mechanical key switch with neat diagram.
 - b) With block diagram explain the working principle of Flat Bed Scanner.
 - c) Describe any four characteristics of power supply.
 - d) State any four advantages of ON-Line UPS over OFF Line UPS.
 - e) Write any four advantages of Bluetooth.
 - f) Draw the interface diagram for centronics and timing waveforms.
- 5. Attempt any TWO of the following :** **16**
- a) State any eight features of H67 or P67 chipset.
 - b) List any eight motherboard selection criterion.
 - c) Draw block diagram of Internal Modem and explain working of each block.
- 6. Attempt any TWO of the following :** **16**
- a) Give any eight specifications of Blue ray disc with typical values.
 - b) Describe FM and MFM method of recording with suitable example.
 - c) With block diagram describe the working of SMPS.
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