

Time : 3 Hours

Marks : 80

**Instructions :**

1. All Questions are Compulsory.
2. Each Sub-question carry 5 marks.
3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
4. Question paper of 80 Marks, it will be converted in to your programme structure marks.

1. Solve any **four** sub-questions.

- a) Explain team L1 Cache, L2 Cache, L3 Cache in detail. 5
- b) Explain working of plasma display in detail. ✓ 5
- c) With the help of block diagram describe working of internal modem. 5
- d) Explain USB 2.0 vs. firewire (IEEE 1394). ✓ 5
- e) Explain dual independent bus architecture. 5

2. Solve any **four** sub-questions.

- a) Explain working principle flat bed scanner. 5
- b) Give the signal voltages for the following colors of ATX connector. 5
  - i) Red
  - ii) Black
  - iii) Orange
  - iv) Purple
- c) Draw the block diagram of RS 232 connector and give the function of the signals. 5
- d) State and explain the features of USB. ✓ 5
- e) Explain following terms related to hard disk - ✓ 5
  - i) cluster
  - ii) cylinder
  - iii) sector
  - iv) landing zone - dead

3. Solve any **four** sub-questions.

- a) Write any four feature of PCI bus. 5
- b) With neat block diagram explain working of SMPS. 5
- c) List different keys used in keyboard. 5
- d) Explain working of optical mouse. 5
- e) Difference between CRT display vs LCD display. 5

4. Solve any **four** sub-questions.

- a) Write difference between PCI with PCI-express bus.
- b) Write a difference between FAT 16, FAT 32.
- c) Write any two modes of operation of CPU.
- d) Explain common problems of Power Supply.
- e) Write down the applications of Parallel Processing.

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