



- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data wherever necessary.
 3. Avoid vague answers and write specific answer related to questions.

1. Either
 - a) Explain DMA data transfer in detail. 8
 - b) What are plug and play devices? Explain in detail. 8

OR

 - c) Explain USB architecture in detail. 8
 - d) Write note on. 8
 - i) Math coprocessor-8087
 - ii) I/O processor-8089

2. Either
 - a) Explain serial data transmission of RS-232. 8
 - b) Explain RS-423 standard for data transmission. 8

OR

 - c) Writes note on RS-499 standard. 8
 - d) What is role of RS-422 standard. 8

3. Either
 - a) Write note on: 8
 - i) Optical Disk.
 - ii) Data storage.
 - b) Explain CRT and Graphic terminals. 8

OR

 - c) Explain data and Disk organisation in detail. 8
 - d) Explain following display cards. 8
 - i) MGA
 - ii) CGA

4. Either
 - a) Explain BIOS and Boot sequences in detail. 8
 - b) Explain Multi-Serial I/O card in detail. 8

OR

 - c) Explain in detail working of motherboard. 8
 - d) What are shortcoming and compatibility of BIOS. 8

5. Solve all questions.
 - a) Explain Refreshing of Dynamic RAM. 4
 - b) Explain Asynchronous serial data communication in brief. 4
 - c) Explain printer mechanism in brief. 4
 - d) Explain FAX and Telex card. 4
