Q.1 Answer the following. (Attempt any four)

[20marks]

- a. Explain interrupt driven input output.
- b. Describe difference between SRAM and DRAM.
- c. Explain DMA.
- d. Explain optical memory in detail.
- e. Explain cache memory principles.
- f. Explain magnetic disk in detail.
- g. Explain process lifecycle.
- h. Describe interrupt with its types.

Q.2 Answer the following.(Attempt any four)

[20marks]

- a. Explain operating system with its services.
- b. Explain swapping in detail.
- c. Explain multiport memory.
- d. Explain time shared bus.
- e. Describe in detail advantages of time sharing operating system.
- f. What are the characteristic of input output channel.
- g. Describe batch operating system.
- h. Explain scheduling with its types.

Q.3 Answer the following. (Attempt any four)

[20marks]

- a. Write a program in assembly language to find largest of numbers.
- b. Write a program in assembly language to transfer block of data.
- c. Explain 8085 microprocessor architecture.
- d. Explain register organisation.
- e. Explain different types of operations.
- f. How instruction is represented in assembly language.
- g. Describe instruction cycle state diagram.
- h. Write a program to find 1's complement.

Q.4 Answer the following. (Attempt any three)

[15 marks]

- a. Explain RAID.
- b. Explain process control block.
- c. Write a program in assembly language for addition of two numbers.
- d. Explain paging in detail.
- e. Explain magnetic tape.
- f. Explain external devices with block diagram.