

- g. The number of bits required to address a 4K memory are _____
- (A) 6 bits (B) 8 bits
(C) 12 bits (D) 16 bits
- h. The time taken for the read/write head to move to the correct track on the magnetic disk is called
- (A) search delay (B) latency delay
(C) seek time (D) approach time
- i. What is the name of the computer terminal which gives paper printout?
- (A) display screen (B) soft copy terminal
(C) hard terminal (D) plotter
- j. What is the storage capacity of a 5.25 inches double sided ,double density disk having 40 tracks with each track having 9 sectors and each sector storing 512 bytes?
- (A) $40 \times 9 \times 512 \times 2$ KB (B) $40 \times 9 \times 512 / 1024$ KB
(C) $40 \times 9 \times 512 \times 2 / 1024$ Bytes (D) $40 \times 9 \times 512 \times 2 / 1024$ KB

**Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.**

- Q.2** a. Write salient features of fifth generation computers. (8)
- b. Draw a block diagram of basic organization of a computer system and explain about storage unit of this organization. (8)
- Q.3** a. Explain about the functions of various registers commonly used in computers. (8)
- b. Write a note on processor speed of a computer. (8)
- Q.4** a. Name and explain the two file access methods at the operating system level. (8)
- b. Explain the printing mechanism of inkjet printer. (8)
- Q.5** a. A disk pack has 11 plates with 20 read/write heads which can take 400 positions across the disk surface. Each track on a disk surface is divided in to 100 sectors of 512 bytes each.
Determine :
- (i) The number of cylinders in the disk.
(ii) The number of tracks in a cylinder.
(iii) The volume of data at any position of read/write head.
(iv) Total storage capacity (8)

- b. Define access time, seek time, latency and transfer rate of magnetic disk. (8)
- Q.6**
 - a. What is paging? Explain paging mechanism with the help of an example. (8)
 - b. Mention the tasks performed by utility programs. (4)
 - c. What are the functions of a communication software? (4)
- Q.7**
 - a. Differentiate between flatbed scanner and hand held scanner. (8)
 - b. Define vision input system. Write steps involved to recognize a object by vision input system. (8)
- Q.8**
 - a. Define Read Only Memory. Write about different types of ROM used in computers. (8)
 - b. When are two processes said to be in a dead locked state. Explain with the help of an example. (8)
- Q.9**
 - a. Write about various addressing methods that can be used to apply formula/functions in MS-EXCEL. (8)
 - b. What is the function of EDIT menu of MS-WORD? Write about various options, their functions and the shortcut keys available under this option. (8)