2021

Time : 3 hours

Full Marks : 60

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Groups as directed.

Group – A

(Compulsory)

1. Answer all questions of the following : 1×10 = 10

    (a) Define Throughput ?

    (b) What is Scheduler ?

    (c) Define Non preemptive scheduling.

    (d) What is Kernel ?

    (e) What is an inode ?

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(Turn over)

(f) Define Vritual Memory.

(g) What is bit vector ? Show with example.

(h) Define PR.

(i) What is SSTF ?

(j) Define CPU scheduling.

2. What do you mean by Paging ? Discuss the advantages and disadvantages of paging.   5

Group – B

Answer any **three** questions of the following :

$$15 \times 3 = 45$$

3. What is a process ? Explain the PCB and the Various Process State.

4. Consider the following page reference string :

   1, 2, 3, 1, 4, 5, 6, 2, 1, 3, 2, 7, 6, 3, 4, 1, 2, 6. How many page faults would occur for the FIFO and LRU ? Assume six frames.

5. Explain the various disk scheduling techniques with suitable example of any one scheduling technique.

6. What is DMA ? Discuss its advantages. What are the responsibilities of DMA controller ?

7. What are files ? Write, in detail, about file allocation methods.

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