2020

COMPUTER SCIENCE (Honours)

Paper : DC-6(a)

(Operating System)

(CBCS)

Full Marks : 25 Time : Two Hours

The figures in the margin indicate full marks.

Group - A

Answer any *five* questions. 2×5=10

1. (a) What is Deadlock?

   (b) What is multi threading?

   (c) What is Multitasking operating system?

   (d) Differentiate between Independent and Co-operating process.

   (e) What are the uses of the Long term scheduler and the Short term scheduler?

   (f) What is Preemptive and Non-Preemptive Scheduling?

   (g) What is critical section?

Group - B

Answer any *three* questions. 5×3=15

2. Explain LRU page replacement algorithm with an example. 5

3. What is PCB? Explain the life cycles of a process. 2+3=5

4. Consider the following set of processes :

Process	Burst Time	Arrival Time
P_1	6	2
P_2	5	1
P_3	2	3
P_4	1	6

(a) Draw the Gantt charts illustrating the execution of these processes using SJF scheduling.

(b) Calculate the average waiting time and turned around time. 3+2=5

5. Write a short note on any *one* : 5

(a) Resource Allocation Graph.

(b) Virtual memory.