

NB : Question no 1.is compulsory .

Attempt any three out of remaining.

Assumptions are made wherever necessary.

All questions carry 10 marks.

- Q1. a. List out characteristics of OS and explain any two. 10
- b. What are the differences between process and threads.
- c. Define the **term** multiprogramming and multithreading.
- d. List out features of RTO's.
- e. What are all the goals of CPU scheduling.

- Q2. a. Explain the preemptive and non preemptive scheduling algorithms with example. 5
- b. Calculate Turnaround time (TAT) and Waiting time for the below given case by applying preemptive priority scheduling algorithm. The arrival time for all the process is =0, draw the Gantt chart also. 5

Process	Burst Time	Priority
P1	12	4
P2	10	5
P3	5	2
P4	4	1
P5	3	3

- Q3. Explain three dynamic memory allocation algorithms with example. 10
- Q4. Explain the concept of I/O management. 10
- Q5. Explain the RTO's with it's architecture. 10
- Q6. a. Explain the concept of paging. 5
- b. Explain these commands with syntax - man, ls, cp, mkdir, rmdir. 5
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