

Reg. No.:

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Mid-Term Examinations – Nov 2024

Programme	: B.Tech. CSE	Semester	: Interim Sem 2024-25
Course	: Operating System	Code	: CSE3003
Faculty	: CS RAJPOOT(100592)	Slot/ Class No.	: B22+B24+F21
Time	: 1 ½ hours	Max. Marks	: 50

Answer all the Questions

Q.No.	Question Description	Marks
1	Explain the layered approach of operating system structure with a supporting diagram.?	10
2	Distinguish between the following terms with example. (i) Multiprogramming and multitasking (ii) Process and program (iii) Time sharing system and parallel processing system	10
3	Explain the followings- I. Inter process communication II. Mutual exclusion and race condition III. Critical section	10
4	What are the necessary condition for deadlock? Explain resource graph model and safe-unsafe states with suitable example.?	10
5	Calculate the average waiting time and the average turnaround time by drawing the Gantt chart using SJF and the Priority scheduling algorithm?	

Processes	Arrival Time	Burst Time	Priority
P1	0	8	3
P2	1	4	2
P3	2	9	1
P4	3	5	4

10

