ENGINEERING COLLEGE AJMER

B.Tech V Sem Cyber and IT, Subject: Operating Systems, Mid Term-I (2024-25) Duration: 1 Hrs, MM: 12

Q:1 Suppose the following jobs arrive for processing at the time indicated, each job will run the listed amount of time.

Jobs	Arrival Time	Burst Time(Sec)
1	0.0	8
2	0.4	4
3	1.0	1

Draw Gantt charts and compute AWT and ATAT of these jobs using following algorithms:-

a.) FCFS b.) Non Preemptive SJF c.) RR (q=2)

Q:2 Explain process states and PCB.

Q:3 Consider the snapshot of a system.

Process	Allocation	Max	Available
P0	010	753	332
P1	200	322	
P2	302	902	
P3	211	222	
P4	002	433	

Answer the following question using the banker's Algorithm

a. What is the content of matrix need?

b. Is the system in safe state? Yes

c. If a request for process P1 arrives for (1, 0, 2) can the request be granted immediately?