Os25 qbank

1. Explain process state model.
2. What is a process? Explain Process control block in detail
3. What are different types of process scheduling algorithms? Explain anyone scheduling algorithm with example
4. Give detail comparison of user level and kernel level threads.
5. What is an Operating System? Explain structure of Operating System
6. Explain objectives and characteristics of modern operating system. Explain
7. Network OS.
8. WRITE SHORT NOTE:
    i. Real Time OS
    ii. Virtual Memory
    iii. Android
    iv. Embedded OS
    v. IOT

9. Compare process scheduling and process switching.

10. Consider the following snapshot of the processes

PROCESS	Burst time	Arrival time	Priority
P1	8	0	1
P2	20	1	3
P3	3	2	2
P4	6	3	5
P5	12	4	4

i. Draw the Gantt chart for the execution of the processes, showing their start time and end time using FCFS, SJF (without considering the priority), priority scheduling (pre-emptive), RR (with time quantum=5),
ii. Calculate turnaround time, and average waiting time and average turnaround time for the system.

12. What is Threading and Multithreading? Explain importance of Multithreading.

13. What are the various objectives and functions of Operating Systems?

14. Differentiate between process and threads

15. What are features of Mobile and Real Time Operating Systems?
16. What is a thread? How multithreading is beneficial? Compare and contrast different multithreading models
17. Explain different scheduling criteria.

18. Consider the following set of processes with their burst times given below:

Process name	Burst time	ArrivalTime(ms)	Priority(smallerno=higher priority)
P1	24	0	5
P2	7	3	3
P3	6	5	2
P4	10	10	1

    i. 1.Draw the Gantt chart for FCFS, SJF, Priority(preemptive) , Round Robin(quantum=4)scheduling
    ii. Calculate average waiting time for each of the above algorithm.

19. What is open-source operating system? What are the design issues of Mobile operating system and Real time operating system?
20. Explain booting process in detail.
21. What are system calls? what are different system calls in Unix and windows?
22. Differentiate between open-source and proprietary operating system
23. Compare and contrast long term,medium term and short term scheduler.
24. Describe the implementation of file allocation techniques?
25. Explain about file attributes,file operations and file types.
26. Explain different method to access a file.