# **MULTIPLE CHOICE QUESTIONS**

# **UNDERSTANDING**

- 1. Process execution cycle consist of which of the following
  - a. Only CPU Execution
  - b. Only I/O Wait
  - c. Both CPU Execution and I/O Wait
  - d. None of the above
- 2. Process execution starts with
  - a. CPU burst
  - b. Input burst
  - c. Output burst
  - d. I/O wait
- 3. Process execution ends with
  - a. CPU burst
  - b. Input burst
  - c. Output burst
  - d. I/O wait
- 4. Which Scheduling does this "Once a CPU is allocated to process, the process keeps the CPU until it releases the CPU either by terminating or by switching to waiting state".
  - a. Preemptive
  - **b.** Non- Preemptive
  - c. Both The above
  - d. None of the above
- 5. Which Scheduling does this "Once a CPU is allocates to process, the process can be forcibly be taken away from the CPU can be allocated to the new process".
  - a. **Preemptive**
  - b. Non-Preemptive
  - c. Both The above
  - d. None of the above

6. Which of the following gives control of CPU to process selected by short term scheduler

#### a. Dispatcher

- b. Switching Context
- c. User mode
- d. None of the above
- 7. Which of the following are functions of dispatcher
  - a. Switching context
  - b. Switching to user mode
  - c. Jumping to the proper location in the user program to restart that program
  - d. All the above
- 8. The time taken by the dispatcher to stop one process and start another process is called as
  - a. Latency
  - b. CPU Utilization
  - c. Throughput
  - d. None of the above
- 9. Which criteria says we want to keep the CPU as busy as possible.
  - a. CPU utilization
  - b. Throughput
  - c. Turnaround time
  - d. Waiting time
- 10. The number of processes completed per time unit is called as
  - a. CPU utilization
  - b. Throughput
  - c. Turnaround time
  - d. Waiting time
- 11. The interval from the time of submission of a process to the time of completion is

- a. CPU utilization
- b. Throughput
- c. Turnaround time
- d. Waiting time
- 12. The amount of time that a process spends waiting in the ready queue is called
  - a. CPU utilization
  - b. Throughput
  - c. Turnaround time
  - d. Waiting time
- 13. The time interval between submission of a request and the first response is called
  - a. CPU utilization
  - b. Throughput
  - c. Turnaround time
  - d. Response time

# **APPLICATIONS**

- 14. Give the Full form of FCFS
  - a. FIRST-COME, FIRST-SERVED
  - b. FIRST-COME, FIRST-Scan
  - c. FIRST-Case, FIRST-SERVED
  - d. FIRST-Case, FIRST-Scan
- 15. Full form of SJF
  - a. Shortest Job First
  - b. Simple Job First
  - c. Shortest Job Fine
  - d. Simple Job Fine
- 16. Equal Priority process are processed in which order
  - a. FCFS
  - b. SJF- preemptive

- c. SJF Non-Preemptive
- d. None of the above
- 17. Which Scheduling algorithm takes time slice
  - a. FIRST-COME, FIRST-SERVED
  - b. Shortest Job First
  - c. Round Robin
  - d. Multi-level Queue Scheduling
- 18. A small Unit of time is called
  - a. Time gap
  - b. Time Slice
  - c. Nano Time
  - d. None of the above
- 19. Which Scheduling algorithm allows the process to move between queue
  - a. FIRST-COME, FIRST-SERVED
  - b. Shortest Job First
  - c. Round Robin
  - d. Multi-level feedback Queue Scheduling
- 20. Which among the following partitions the ready queue into several separate Queue
  - a. FIRST-COME, FIRST-SERVED
  - b. Shortest Job First
  - c. Round Robin
  - d. Multi-level Queue Scheduling
- 21. Which is the technique used for gradually increasing the priority of process that waits for a long time
  - a. Starvation
  - b. Aging
  - c. Fragmentation
  - d. None of the above

22. What is the problem called when a process is ready to run but lacks CPU and is Blocked-waiting for the CPU

- a. Starvation
- b. Aging
- c. Fragmentation
- d. None of the above
- 23. Round Robin Scheduling algorithm is especially design for which system
  - a. Batch Processing System
  - b. Multi Programming Systems
  - c. Time Sharing System
  - d. Real Time System
- 24. Which of the following is correct
  - a. foreground or interactive
  - b. background or interactive
  - c. foreground or batch
  - d. None of the above
- 25. Which scheduling algorithm moves process to lower priority queue if it uses too much
  - a. CPU time
  - b. FIRST-COME, FIRST-SERVED
  - c. Shortest Job First
  - d. Multi-level feedback Queue Scheduling

#### FOUR MARKS QUESTIONS

# **UNDERSTANDING**

- 1. Give a brief outline about CPU Schedulers.
- 2. Briefly explain different scheduling criteria
- 3. Explain multi-level Queue Scheduling.
- 4. Explain multi-level feedback Queue Scheduling.
- 5. Explain the working of First-come First Served scheduling with example
- 6. Explain the working of Shortest job first scheduling with example

#### **APPLICATIONS**

- 7. Explain the working of pre-emptive Shortest job first scheduling with example
- 8. Explain the working of non-pre-emptive Shortest job first scheduling with example
- 9. Explain the working of Priority Scheduling with example
- 10. Explain the working of Round Robin scheduling with example
- 11. Consider the following set of process, with the length of CPU-burst time given in milliseconds

Process	Burst Time
P1	24
P2	3
Р3	3

Draw Gantt chart and find average waiting time using FCFS scheduling.

12. Consider the following set of process, with the length of CPU-burst time given in milliseconds

Process	Burst Time	Arrival Time
P1	8	0
P2	4	1
Р3	9	2
P4	5	3

Draw Gantt chart and find average waiting time using SJF Non-Pre-emptive scheduling.

13. Consider the following set of process, with the length of CPU-burst time given in milliseconds

Process	Burst Time	Arrival Time
P1	8	0
P2	4	1
Р3	9	2
P4	5	3

Draw Gantt chart and find average waiting time using SJF Pre-emptive scheduling.

14. Consider the following set of process, with the length of CPU-burst time given in milliseconds. Quantum Time is 4ms

Process	Burst Time
P1	24
P2	3
Р3	3

Draw Gantt chart and find average waiting time using Round Robin scheduling.

15. Consider the following set of process, with the length of CPU-burst time given in milliseconds

Process	Burst Time	Priority
P1	10	3
P2	1	1
Р3	2	4
P4	1	5
P5	5	2

Draw Gantt chart and find average waiting time using Priority scheduling.