1.Which scheduling algorithm executes processes strictly in the order of their arrival?

```
[ ] SJF
[x] FCFS
[ ] Priority Scheduling
[ ] Round Robin
```

2.The Convoy Effect is most commonly associated with which scheduling algorithm?

```
[ ] SJF
[x] FCFS
[ ] HRRN
[ ] Lottery Scheduling
```

3.In SJF scheduling, the CPU is allocated to the process with:

```
[ ] Highest priority
[ ] Longest burst time
[x] Smallest burst time
[ ] Earliest deadline
```

4.The preemptive version of SJF is known as:

```
[ ] Round Robin
[ ] FCFS
[x] SRTF
[ ] HRRN
```

5.Which scheduling algorithm may cause starvation of long processes?

```
[x] SJF
[ ] FCFS
[ ] Round Robin
[ ] Lottery Scheduling
```

6.In Priority Scheduling, the CPU is assigned to the process with:

```
[ ] Lowest arrival time
[x] Highest priority
[ ] Longest burst time
[ ] Smallest waiting time
```

7.Starvation in priority scheduling can be prevented using:

```
[ ] Time Quantum
[x] Aging
[ ] Preemption
[ ] Throughput control
```

8.Round Robin scheduling is primarily designed for:

```
[ ] Batch systems
[ ] Real-time systems
[x] Time-sharing systems
[ ] Embedded systems
```

9.In Round Robin scheduling, each process is executed for a fixed time called:

```
[ ] Burst Time
[ ] Waiting Time
[ ] Turnaround Time
[x] Time Quantum
```

10.If the time quantum in Round Robin is very large, it behaves like:

```
[ ] SJF
[ ] Priority Scheduling
[x] FCFS
[ ] HRRN
```

11.Which metric measures how long a process waits in the ready queue?

```
[ ] Turnaround Time
[x] Waiting Time
[ ] Response Time
[ ] Throughput
```

12.Response Time is defined as:

```
[ ] Completion time minus arrival time
[x] First time CPU is allocated minus arrival time
```

```
[ ] Burst time minus waiting time
[ ] Waiting time plus burst time
```

13.Throughput refers to:

```
[ ] CPU idle time
[x] Number of processes completed per unit time
[ ] Total burst time
[ ] Context switch rate
```

14.SJF is considered optimal because it:

```
[ ] Maximizes throughput
[x] Minimizes average waiting time
[ ] Prevents starvation
[ ] Maximizes CPU idle time
```

15.SRTF makes scheduling decisions when:

```
[ ] A process completes
[ ] A new process arrives
[x] Both A and B
[ ] Only when CPU is idle
```

16.Multilevel Queue Scheduling divides processes based on:

```
[ ] Burst time
[ ] Arrival time
[x] Process category
[ ] Waiting time
```

17.In Multilevel Queue Scheduling, processes:

```
[ ] Can move between queues
[x] Cannot move between queues
[ ] Always stay in highest queue
[ ] Share equal priority
```

18.Multilevel Feedback Queue differs because it:

```
[ ] Uses only FCFS
[x] Allows process movement between queues
[ ] Does not use time quantum
[ ] Ignores priorities
```

19.In MLFQ, if a process uses too much CPU time, it is:

```
[ ] Terminated
[ ] Promoted
[x] Demoted to lower-priority queue
[ ] Given higher priority
```

20.HRRN stands for:

```
[ ] High Response Ready Node
[x] Highest Response Ratio Next
[ ] High Remaining Runtime Node
[ ] Hybrid Round Robin Network
```

21.The response ratio in HRRN is calculated as:

```
[ ] W/S
[ ] S/W
[x] (W+S)/S
[ ] W-S
```

22.HRRN scheduling is:

```
[ ] Preemptive
[x] Non-preemptive
[ ] Real-time
[ ] Deadline-based
```

23.Lottery Scheduling selects a process based on:

```
[ ] Arrival time
[ ] Priority value
[x] Random ticket selection
[ ] Burst time
```

24.In Lottery Scheduling, more tickets mean:

```
[ ] Less chance of execution
[ ] Equal chance
[x] Higher probability of execution
[ ] Immediate execution
```

25.Which scheduling algorithm is probabilistic in nature?

```
[ ] SJF
[ ] FCFS
[x] Lottery Scheduling
[ ] HRRN
```

26.CPU utilization aims to:

```
[ ] Increase waiting time
[x] Keep CPU as busy as possible
[ ] Reduce throughput
[ ] Increase idle time
```

27.Turnaround Time is calculated as:

```
[x] Completion Time - Arrival Time
[ ] Burst Time - Waiting Time
[ ] Waiting Time - Burst Time
[ ] Arrival Time - Completion Time
```

28.Waiting Time is equal to:

```
[x] Turnaround Time - Burst Time
[ ] Burst Time - Turnaround Time
[ ] Completion Time - Burst Time
[ ] Arrival Time - Burst Time
```

29.Which algorithm combines FCFS with preemption?

```
[x] Round Robin
[ ] SJF
[ ] HRRN
[ ] Lottery Scheduling
```

30.The main disadvantage of SRTF is:

```
[ ] High CPU utilization
[x] Starvation of long processes
[ ] No context switching
[ ] No preemption
```