1. _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.

Long term

Short term

Medium term

None of the above

2. _____ does the job of allocating a process to the processor.

Long term scheduler

Short term scheduler

Medium term scheduler

Dispatcher

3. A process can be _____

single-threaded

multi-threaded

Both single-threaded and multi-threaded

None of above

4. A process can be terminated due to _____

normal exit

fatal error

killed by another process

All of the mentioned

5. A Process Control Block(PCB) does not contain which of the following :

Bootstrap program

Stack

Process State

I/O status information

6. An optimal scheduling algorithm in terms of minimizing the average waiting time of a given set of processes is _____.

First come First served scheduling algorithm

Round robin scheduling algorithm

Shortest job - first scheduling algorithm

None of the above

7. CPU performance is measured through _____.

Throughput

MHz

Flaps

None of the above

8. FIFO scheduling is _____.

Preemptive Scheduling

Non Preemptive Scheduling

Deadline Scheduling

Fair share scheduling

9. In operating system, each process has its own _____

address space and global variables

open files

pending alarms, signals and signal handlers

All of the mentioned

10. In Priority Scheduling a priority number (integer) is associated with each process. The CPU is allocated to the process with the highest priority (smallest integer = highest priority). The problem of Starvation of low priority processes may never execute, is resolved by _____.

Terminating the process

Aging

Mutual Exclusion

Semaphore

11. In the blocked state, ____

The process which is running is found

The processes waiting for I/O are found

The processes waiting for the processor are found

None of the above

12. In Unix, Which system call creates the new process?

fork

create

new

first

13. Kernel threads

cannot be supported and managed directly by the operating system

can be supported and managed directly by the operating system

are supported below the kernel and are managed without kernel support

None of the above

14. Light weight process is called _____

thread

tiny process

small process

stack

15. Most operating systems (including UNIX, Linux, and Windows) identify processes according to a unique _____

process counter

process state

process number

process identifier

16. Process control block (PCB) contains which of the following:

List of open files

Process state

Process id

All of the mentioned

17. Round robin scheduling falls under the category of _____

Non-preemptive scheduling

Preemptive scheduling

All of the mentioned

None of the mentioned

18. Round robin scheduling is essentially the preemptive version of _____.

First come First served scheduling algorithm

Shortest job first scheduling algorithm

Shortest remaining time next scheduling algorithm

Non preemptive priority scheduling algorithm

19. Saving the state of the old process and loading the saved state of the new process is called _____.

Context Switch

State

Multi programming

None of the above

20. Suppose that a process is in “Blocked” state waiting for some I/O service. When the service is completed, it goes to the :

Running state

Ready state

Suspended state

Terminated state

21. The entry of all the PCBs of the current processes is in :

Process Register

Program Counter

Process Table

Process Unit

22. The list of processes waiting for a particular I/O device is called a_____

device queue

ready queue

job queue

all of the mentioned

23. The number of processes completed per unit time is known as _____.

Output

Throughput

Efficiency

Capacity

24. The primary distinction between the short term scheduler and the long term scheduler is :

The length of their queues

The type of processes they schedule

The frequency of their execution

None of these

25. The Process Control Block is :

Process type variable

Data Structure

A secondary storage section

A block in memory

26. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called the _____

device queue

ready queue

job queue

All of the mentioned

27. The ready queue is generally stored as a_____

Array

Stack

Linked List

None of above

28. The state of a process is defined by :

The final activity of the process

The activity just executed by the process

The activity to next be executed by the process

The current activity of the process

29. The strategy of making processes that are logically runnable to be temporarily suspended is called _____

Non preemptive scheduling

Preemptive scheduling

Shortest job first

First come First served

30. The systems which allow only one process execution at a time, are called _____

uniprogramming systems

uniprocessing systems

unitasking systems

None of the mentioned

31. Thread shares with other threads belonging to the same process its

thread id

program Counter

register set and stack

code section and data section

32. User threads _____

are supported above the kernel and are managed without kernel support

are supported below the kernel and are managed without kernel support

are supported above the kernel and are managed with kernel support

are supported below the kernel and are managed with kernel support

33. What is a long-term scheduler ?

It selects which process has to be brought into the ready queue

It selects which process has to be executed next and allocates CPU

It selects which process to remove from memory by swapping

None of these

34. What is a medium-term scheduler ?

It selects which process has to be brought into the ready queue

It selects which process has to be executed next and allocates CPU

It selects which process to remove from memory by swapping

None of these

35. What is a short-term scheduler ?

It selects which process has to be brought into the ready queue

It selects which process has to be executed next and allocates CPU

It selects which process to remove from memory by swapping

None of these

36. What is FIFO algorithm?

First executes the job that came in last in the queue

First executes the job that came in first in the queue

First executes the job that needs minimal processor

First executes the job that has maximum processor needs

37. What is the ready state of a process?

When process is scheduled to run after some execution

When process is unable to run until some task has been completed

When process is using the CPU

None of the mentioned

38. When the process issues an I/O request :

It is placed in an I/O queue

It is placed in a waiting queue

It is placed in the ready queue

It is placed in the Job queue

39. Which of the following algorithms tends to minimize the process flow time?

First come First served

Shortest Job First

Earliest Deadline First

Longest Job First

40. Which of the following is a criterion to evaluate a scheduling algorithm?

CPU Utilization: Keep CPU utilization as high as possible

Throughput: number of processes completed per unit time

Waiting Time: Amount of time spent ready to run but not running

All of the above

41. Which of the following is not the state of a process ?

Blocked

Old

Ready

Running

42. Which of the following Multithreading model has drawback "that creating a user thread requires creating the corresponding kernel thread".

One to One

One to Many

Many to One

Many to Many

43. Which of the following Multithreading model maps many user-level threads to one kernel thread.

One to One

One to Many

Many to One

Many to Many

44. Which of the following Multithreading model multiplexes many user-level threads to a smaller or equal number of kernel threads?

One to One

One to Many

Many to One

Many to Many

45. Which of the following state transitions is not possible ?

Blocked to running

Ready to running

Blocked to ready

Running to blocked

46. Which state of a process defined "Instructions are being executed"

New

Ready

Running

Blocked

47. Which state of a process defined "The process has finished execution"

Exit

Ready

Running

Blocked

48. Which state of a process defined "The process is being created"

New

Ready

Running

Blocked

49. With round robin scheduling algorithm in a time shared system _____

using very large time slices converts it into First come First served scheduling algorithm

using very small time slices converts it into First come First served scheduling algorithm

using extremely small time slices increases performance

using very small time slices converts it into Shortest Job First algorithm

50. Which scheduling algorithm is non preemptive scheduling algorithm?

First come First served

Round Robin

Shortest Remaining Time Next

Preemptive Priority

51. Which scheduling algorithm is preemptive scheduling algorithm?

First come First served

Shortest job first

Shortest Remaining Time Next

Non Preemptive Priority

52. The interval from the time of submission of a process to the time of completion is termed as _____

waiting time

turnaround time

response time

throughput

53. In priority scheduling algorithm,

CPU is allocated to the process with highest priority

CPU is allocated to the process with lowest priority

Equal priority processes can not be scheduled

None of the mentioned

54. In preemptive priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of _____

all process

currently running process

parent process

init process

55. Time quantum is defined in _____

shortest job scheduling algorithm

priority scheduling algorithm

round robin scheduling algorithm

multilevel queue scheduling algorithm

56. A process is selected from the _____ queue by the _____ scheduler, to be executed.

blocked, short term

wait, long term

ready, short term

ready, long term

57. One of the disadvantages of the priority scheduling algorithm is that :

It schedules in a very complex manner

Its scheduling takes up a lot of time

It can lead to some low priority process waiting indefinitely for the CPU

None of these

58. Three CPU intensive processes requires 10, 20 and 30 time units and arrive at times 0, 2 and 6 respectively. The operating system implements a shortest remaining time next scheduling algorithm. Considering that the context switches at time zero and at the end are not counted the number of context switches are needed is _____.

4

3

2

1

59. On a single processor four jobs are to be executed. At time t = (0) + (jobs arrive in the order of A, B, C, D). The burst CPU time requirements are 4, 1, 8, 1 time units respectively. Under Round Robin Scheduling with the time slice of 1 time unit the completion time of A is _____."

3

5

7

9

60. _____ is a technique of improving the priority of process waiting in Queue for CPU allocation.

Starvation

Ageing

Revocation

Relocation

61. Which of the following are the states of a five state process model? i) Running ii) Ready iii) New iv) Exit v) Destroy

i, ii, iii and v only

i, ii, iv and v only

i, ii, iii, and iv only

All i, ii, iii, iv and v

62. State which statement is true for Suspended process? i) The process is not immediately available for execution. ii) The process may be removed from suspended state automatically without removal order.

i only

ii only

i and ii both

None of the above

63. Following is/are the reasons for process suspension.

Swapping parent process

Interrupt request

Timing

All of the above

64. In process scheduling,_____ determines when new processes are admitted to the system.

long term scheduling

medium term scheduling

short term scheduling

None of the above

65. Five batch jobs A to E arrive at same time. They have estimated running times 10,6,2,4 and 8 minutes. Their priorities are 3,5,2,1 and 4 respectively with 5 being highest priority. In which sequence process will get turn to execute under non preemptive priority scheduling algorithm.

ABCDE

BEACD

DCAEB

EDCBA

66. Five batch jobs A to E arrive at same time. They have estimated running times 10,6,2,4 and 8 minutes. Their priorities are 3,5,2,1 and 4 respectively with 5 being highest priority. In which sequence process will get turn to execute under shortest job first scheduling algorithm.

CDBEA

ABCDE

AEBDC

EDCBA

67. Five batch jobs A to E arrive at same time. They have estimated running times 10,6,2,4 and 8 minutes. Their priorities are 3,5,2,1 and 4 respectively with 5 being highest priority. In which sequence process will get turn to execute under first come first serve scheduling algorithm.

CDBEA

ABCDE

AEBDC

EDCBA

68. Five batch jobs A to E arrive at 0,1,2,4,5. They have estimated running times 10,6,2,4 and 8 minutes. Their priorities are 3,5,2,1 and 4 respectively with 5 being highest priority. In which sequence process will get turn to execute under round robin scheduling algorithm for quantum time=4.

ABCDE

EDCBA

ABCDEABEA

ABCDEABEAB

69. Four batch jobs A to D arrive at same time. They have estimated running times 10,6,2 and 8 minutes. Their priorities are 3,2,1 and 4 respectively with 4 being highest priority. Which process will get turn first to execute under preemptive priority scheduling algorithm.

A

B

C

D

70. Four batch jobs A to D arrive at same time. They have estimated running times 10,6,2 and 8 minutes. Their priorities are 3,2,1 and 4 respectively with 4 being highest priority. Which process will get turn first to execute under shortest job first scheduling algorithm.

A

B

C

D