MCQs on Unit I

1. Multiprogramming of computer system increases

1. memory
2. storage
3. CPU utilization
4. cost of computation

C

2. Multiprocessor system have advantage of

a. Increased Throughput

b. Expensive Hardware

c. Operating System

d. both and b

A

|  |
| --- |
| 3. Process is   1. Program in high level language kept on disk 2. Contents of Main memory 3. A program in execution 4. A job in secondary memory   C |

4. Which of the following is false statement

1. **Running**: currently executing on CPU
2. **Ready:** Waiting to be scheduled, ready to run but not yet run/ the process is waiting to be assigned to the processor
3. **Blocked:** suspended, not ready to run. Process is waiting for some event to occur (such as I/O completion)
4. New: New process is waiting

D

5. The number of processes completed per unit time is known as \_\_\_\_\_\_\_\_\_\_

a. Output

b. Throughput

c. Efficiency

d. capacity

b

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

a. Running

b.old

c. waiting

d. new

B

7. The state of a process is defined by:

a. The current activity of the process

b. the final activity of the process

c. the activity just executed by the process

d.the activity to next be executed by the process

A

8. A single thread of control allows the process to perform:

1. Only one task at a time
2. Multiple tasks at a time
3. Only two tasks at a time
4. All the above

A

9. Process Control Block contains which of the following

a. list of open files

b. Process states

c. Process number

d. all the above

d

10. The address of the next instruction to be executed for the current process is stored in

a. CPU register

b. Program counter

c. Process State

d. Process number

B

11. Most operating system (including UNIX and windows) identify processes according to unique ……………….

a. Program counter

b. Process state

c. Process number

d. Process identifier

D

12. When a process creates a new process, two possibilities for execution exist

1. The parent continues to execute concurrently with its children

2. the parent stop to execute concurrently with its children

3. the parent waits until some or all of its children have terminates

4.the parent do not wait until some or all of its children have terminated

1. 1 and 2
2. 2 and 3
3. 2 and 4
4. 1 and 3

D

13. The new process consists of copy of the …………. of the original process. This mechanism allows the parent process to communicate easily with its child process

a. address space

b. Process state

c. Process number

d. Process identifier

A

14. Both processes (parent and child) continue execution at the instruction after the fork(), with one difference: the return code for the fork() is …………… for the new (child) process, whereas the ………… process identifier of the child is returned to the parent

a. Negative integer, zero

b. zero, negative integer

c. nonzero inteer, zero

d. zero, non zero integer

D

15. Creating a separate process using the UNIX…… system call

a. fork

b.init

c.exec

d. wait

A

16. After a fork() system call, one of the two processes typically uses the ……………system call to replace the processes memory space with a new program

a. exit

b.init

c. exec

d. wait

C

17. The parent can create more children or if it has nothing else to do while the child runs, it can issue a ……………..system call to move itself off the ready queue until the termination of the child

a. exit

b.init

c. exec

d. wait

D

18. A process terminates when it finishes executing its final statement and asks the operating system to delete it by using the …………….system call

a. exit

b.init

c. exec

d. wait

A

19. A parent may terminate the execution of one of its children for a variety of reasons, which of the following is true.

1. The child has exceeded its usage of some of the resources that it has been allocated

2. The task assigned to child is no longer required

3. The parent is exiting, and the operating system does not allow a child to continue if its parent terminates

a. 1 only

b. 1 and 2

c. 2 and 3

d. All the above

D

20……. is a **process** that has completed execution (via the exit system call) but still has an entry in the **process** table

a. Zombie

b. Orphans

c. Terminated

d. all the above

A

21. When a program is loaded into the memory and it becomes a process, it can be divided into which of the sections.

1. stack

2. Heap

3. Code

4. Data

a. 1

b. 1, 2

c. 1,2,3

d. 1,2,3,4

D

22………………………… section is dynamically allocated memory to a process during its run time

a. stack

b. Heap

c. Code

d. Data

B

23. A process generally also includes the process……………….., which contains temorary data (sucha ss funciton parameters, return addresses, and local variables)

a. code section

b. Program counter

c. Stack

d. Data section

C

24. A process generally also includes the process…………………. which contains global variables

a. code section

b. Program counter

c. Stack

d. Data section

D

25. POSIX API: a standard set of system calls that an OS must implement

a. True

b. False

A