

Operating System

TIME: 1hr

MARKS: 20

1. To access the services of operating system, the interface is provided by the:

- A. system calls
- B. API
- C. library
- D. assembly instructions

Ans: A

2. The operating system manages

- A. Memory
- B. Processes
- C. Disks and I/O devices
- D. all of the above

Ans: D

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

- A. bootstrap program
- B. stack
- C. Process State
- D. I/O status information

Ans : A

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

- A. The length of their queues
- B. The type of processes they schedule
- C. The frequency of their execution
- D. None of these

Ans: C

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

- **A.** Running state
- **B.** Ready state
- **C.** Suspended state
- **D.** Terminated state
- Ans:B

6. When the memory allocated to a process is slightly larger than the process, then :

- **A.** internal fragmentation occurs
- **B.** external fragmentation occurs
- **C.** both a and b
- **D.** neither a nor b

Ans: A

7. The operating system and the other processes are protected from being modified by an already running process because :

- **A.** they are in different memory spaces
- **B.** they are in different logical addresses
- **C.** they have a protection algorithm
- **D.** every address generated by the CPU is being checked against the relocation and limit registers

Ans: D

8. Run time mapping from virtual to physical address is done by _____

- A. Memory management unit
- B. CPU
- C. PCI
- D. None of the mentioned

Ans: A

9. A state is safe, if _____

- A. the system does not crash due to deadlock occurrence
- B. the system can allocate resources to each process in some order and still avoid a deadlock

- C. the state keeps the system protected and safe
- D. all of the mentioned

Ans: B

10. Which one of the following is not a secondary storage?

- A. Magnetic disks
- B. Magnetic tapes
- C. RAM
- D. None of the mentioned

Ans: C

Each Question Caries 2 marks

- 11. Briefly explain any four different Operating System
- 12. What is the difference between logical address space and physical address space?
- 13. Briefly explain different process scheduling algorithm in Operating System
- 14. What are the difference between paging and segmentation
- 15. What are the four necessary and sufficient conditions behind the deadlock?