

NOVEMBER 2017

50416/SAE5A

Time : Three hours

Maximum.: 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions each in 30 words.

1. What is an Operating system?
2. Define Program Counter.
3. What are the various OS components?
4. What are the different process states available?
5. What is meant by Dispatching?
6. How is Blocked state different from others?
7. Define Memory Management Unit.
8. Compare the Global and Local Allocation.
9. Define Allocation Algorithm.
10. What is victim frame?
11. Define threats.
12. What is a Kernel?

III B.Sc (CS) - Operating Systems.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions each in 200 words.

13. What are the activities of process management in an operating system?
14. Discuss the major activities of file management in an operating system.
15. Explain briefly the Critical Section Problem in Operating System.
16. Give brief discussion about Semaphores and its properties.
17. Explain the three different stages of Binding of Instructions and Data to Memory.
18. Discuss the purpose of file system in Operating System.
19. Explain briefly the I/O Hardware in Operating System.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions each in 500 words.

20. Give a brief account on Operating System Structure.
21. What is a Deadlock? Discuss how to avoid Deadlocks.

22. Explain briefly the Contiguous Allocation in Memory Management.
23. Discuss briefly on free space management in operating system.
24. Explain the Kernel I/O Subsystem in detail.