

October 2018Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
Answer any FOUR questions from the remaining in each PART – A
and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B
and 10 marks in PART – C.]

PART – A

1. What is file manipulation?
2. Define booting.
3. List any two methods for deadlock recovery.
4. Define locating of reference.
5. What is record and file?
6. What are absolute and relative path name?
7. Expand GNOME.
8. What is the content of VFS super block?

PART – B

9. Describe layered and monolithic operating system structure.
10. What is IPC? Give two examples.
11. What is thread? What are the types of thread?
12. Define the functions of memory manager.
13. Describe page allocation.
14. Expand RAID and list the concepts used in RAID technology.
15. List the three levels of file security with an example.
16. What is low level and high level formatting of disc?

PART – C

17. (a) Explain any four types of operating system.

(Or)

(b) Explain system call execution with an example.

18. (a) Explain FCFS and Round Robin scheduling algorithms.

(Or)

(b) Explain: (i)Critical section (ii)Shared memory system.

19. (a) Explain optimal(OPT) and second chance (SC) page replacement policies.

(Or)

(b) Explain hardware support for paging with a neat diagram.

20. (a) Explain file attributes and file operations.

(Or)

(b) What is authentication? Explain any four authentication methods.

21. (a) With diagrams, explain the architecture of Linux.

(Or)

(b) Explain ext2 file system.