October 2018

<u>Time - Three hours</u> (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?
- 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?

[Turn over....

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.