S.No. 7396 PN 15 IT 4

(For candidates admitted from 2015–2016 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Information Technology

OPERATING SYSTEMS

Time : Three hours Maximum : 100 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. Why is the Operating system important?

2. What is batch used for?

3. What is process in OS?

4. What is concurrency in operating system?

5. What is paging in OS?

6. What is virtual memory?

7. What are the different types of scheduling in CPU?

8. What is fair share scheduling?

9. What are the examples of secondary storage management?

10. Write few functions of file management system?

SECTION B — (5 × 7 = 35)

Answer ALL questions, choosing either (a) or (b).

11. (a) What are the various objectives and functions of operating system in OS?

Or

(b) What are the types of serial processing? Explain in detail.

12. (a) What is Dekker's algorithm in operating system?

Or

(b) What are the difference between process and thread?

13. (a) What is fixed portioning? Write the disadvantages of it.

Or

(b) What are the difference between paging and segmentation?

14. (a) Briefly explain disk scheduling algorithm and its types.

Or

(b) What is I/O buffering? What are the techniques used in it.

15. (a) What do you mean by file sharing and protection in OS?

Or

(b) Explain different types of file allocation methods.

SECTION C — (3 × 15 = 45)

Answer any THREE questions.

16. Explain different types of Operating Systems.

17. What are the strategies to deal with deadlock? Explain in detail.

18. Explain the requirements of memory management systems.

19. Describe Briefly about different types of scheduling algorithms.

20. Explain file management system and its architecture.