

15095

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

FIRST SEMESTER

Computer Science

Paper V — OPERATING SYSTEM

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. What are the characteristics of operating systems?
2. Give a note on the evolution of operating systems.
3. What are the principles of deadlock?
4. What are semaphores?
5. Differentiate between paging and segmentation.
6. What is virtual memory?
7. What are the design issues of operating systems?
8. What is I/O buffering?

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. What is a process? Explain the process states with a diagram.

Or

10. Give an overview of UNIX system? Explain about the process management in UNIX operating systems.

11. How to you prevent and avoid deadlocks? Explain.

Or

12. Differentiate and explain UNIX, WINDOWS AND SOLARIS.

13. What is scheduling? Explain the various types of scheduling algorithms in detail.

Or

14. How the memory management can be handled in UNIX, Solaris and Linux operating systems?

15. Explain the concept of file management in UNIX and WINDOWS operating systems.

Or

16. Write short notes on the following :

- (a) Disk scheduling
- (b) Secondary storage management.

