15095

M.Sc. DEGREE EXAMINATION, OCTOBER/NOVEMBER 2015.

FIRST SEMESTER

Computer Science

Paper V — OPERATING SYSTEMS

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 is throughput?

2. What is a deadlock?

3. What is garbage collection?

4. What is record blocking?

5. What is Virtual memory?

6. What is synchronization?

7. What is buffering? Use?

8. What is a logical address?

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks

Each answer should not exceed 6 pages.

9. (a) Differentiate thread switching and process switching.

(b) Explain the process management in UNIX.

Or

10. Discuss the evolution of Operating systems.

11. Explain classical problems of synchronization.

Or

12. Discuss the dinning philosopher's problem using monitors.

13. Explain the memory management in Linux.

Or

14. Discuss the CPU scheduling algorithms.

15. Explain the disk scheduling algorithms.

Or

16. Explain the file organization.