I Semester B.Sc. (I.T.) Examination, June/July 2010 OPERATING SYSTEMS

Time: 3 Hours Max. Marks: 75

PART - A

Answer all the questions:

 $(10 \times 2 + 5 \times 1 = 25)$

- 1. Define System programs.
- 2. What is Multithreading?
- 3. Define a program called a Driver.
- 4. What are the main responsibilities of an operating system?
- 5. Define the life cycle of a process.
- 6. How the operating system maintains a table?
- 7. Define Process Synchronisation.
- 8. What do you mean by Dead Lock avoidance?
- 9. Explain the Banker's Algorithms.
- 10. Define Fragmentation.
- 11. Explain the following terms:
 - a) Paging
 - b) Segmentation
 - c) Address Binding
 - d) Mutual Exclusion
 - e) Security.



PART - B

Answer any five of the following questions:

 $(5 \times 10 = 50)$

- 1. Write down the different qualities of operating system.
- 2. Explain the feature of operating system.
- 3. Explain the evaluation of operating system in detail.
- 4. Explain the process or CPU scheduling and explain any one scheduling algorithms.
- 5. What are the objectives of Virtual memory?
- 6. When you need optimal page replacement algorithms? Explain any two optimal page replacement algorithms.
- 7. Explain the algorithm to support mutual exclusion.
- 8. Explain the different types of access methods.
