

**MCA-117**

**MCA-17**

**M.C.A. DEGREE EXAMINATION –  
DECEMBER, 2018.**

**Second Year**

**OPERATING SYSTEMS**

**Time : 3 hours**

**Maximum marks : 75**

**PART A — (5 × 5 = 25 marks)**

**Answer any FIVE questions.**

1. What are the basic concepts of operating system?  
Write shortly process.
2. Write short note on Semaphore.
3. Explain round robin scheduling with example.
4. Write about device driver in I/O software.
5. What are the basic memory management scheme and explain multiprogramming without swapping or paging.
6. Write short note on memory management with linked list swapping.
7. Explain directory operations.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain the operating system structure in detail.
  9. What is Inter-process Communication? Explain Mutual Exclusion.
  10. What is deadlock? How to avoid deadlock? Briefly explain.
  11. Explain the principles of I/O software.
  12. Describe about virtual memory.
  13. Briefly explain disk space management.
  14. Explain in detail File system reliability.
-