

**III Semester B.C.A. Examination, March 2011**  
**OPERATING SYSTEMS**

Time : 3 Hours

Max. Marks : 80

**Instructions :** 1) Answer **all** questions in Part – A, **6** questions in Part – B and **3** out of **5** questions in Part – C.

2) Part – A : Questions from **1** to **8** carries **one** mark and **9** to **14** carries **2** marks **each**.

3) Part – B : **Each** question carries **5** marks.

4) Part – C : **Each** question carries **10** marks.

**PART – A**

1. Define serial processing.
2. Define external fragmentation.
3. Mention any five qualities of Operating System.
4. What is Kernel ?
5. What are smart terminals ?
6. Expand RTOS.
7. Define invalid page.
8. What is virtual memory ?
9. Define shell.
10. Define editors.
11. What do you mean by pre paging ?
12. Define process synchronization.
13. What is Ostrich method ?
14. What are Wildcards ?

**P.T.O.**

## PART – B

1. With a diagram explain scheduling queues.
2. Explain SJF algorithm with an example.
3. Discuss resource allocation graph with an example.
4. Write a note on MULTICS.
5. Explain Matrix method.
6. Discuss directory structure in a file system.
7. Write a note on File-System Mounting.
8. Explain the characteristics of a Good Intrusion Detection System.

## PART – C

1. Explain different types of operating systems.
  2. What is page replacement and discuss page replacement algorithm.
  3. Explain Readers and Writers Problem.
  4. Explain the classifications of security.
  5. Explain the features of Unix Operating System and text editors.
-