

D 9162

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION
NOVEMBER 2010**

**Computer Science
CS 301 – OPERATING SYSTEM
(2005 Admissions)
(Regular / Improvement)**

Time : Three Hours

Maximum : 80 Marks

Part A

*Answer any **five** questions.
Each question carries **8** marks.*

1. Mention the operating system objectives and functions.
2. Explain the UNIX Architecture.
3. Discuss about **microkernels**.
4. Describe multithreading in detail.
5. Explain the conditions under which a deadlock situation can arise.
6. Discuss non-real time scheduling of **Linux**.
7. Distinguish between single level directory and two level directory structures.

(5 x 8 = 40 marks)

Part B

*Answer any **four** questions.
Each question carries **10** marks.*

8. Discuss the characteristics of modern operating systems.
9. What are the process control blocks? How are they useful in process control and CPU scheduling?
10. Write the Solaris thread synchronization in detail.
11. Explain about windows 2000 threads.
12. Describe the details of virtual memory technique in **Linux**.
13. Discuss in detail the file system in UNIX operating system.

(4 x 10 = 40 marks)