

**D 1675**

**Name.....**

**Reg. No.....**

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION  
NOVEMBER 2009**

Computer Science

CS 301 – OPERATING SYSTEM

(2005 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer any **five** questions.*

*Each question carries 8 marks.*

1. Explain the evolution of operating systems.
2. Discuss the process states in detail.
3. Define address space. Explain window virtual address map.
4. Describe **Linux** tasks.
5. Explain the characteristics of real time operating system.
6. Explain directory structure with an example.
7. Explain the overview of UNIX file system.

(5 x 8 = 40 marks)

**Part B**

*Answer any **four** questions.*

*Each question carries 10 marks.*

8. Discuss the benefits of a **microkernel** organization.
9. Describe four thread synchronisation primitives of Solaris System.
10. Define the term deadlock prevention, detection and recovery. Explain.
11. Discuss UNIX **SUR4** scheduling.
12. Explain how memory is allocated and how paging is performed in Windows.
13. Mention the different types of **110** in UNIX.

(4 x 10 = 40 marks)