

**UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)****MScIT-12 2nd YEAR 3rd SEMESTER ASSIGNMENT**

Last Date of Submission: 15 Jan., 2015

Course Title: Operating System

Course Code: MScIT-11

Year: 2014-15

Maximum Marks: 40 Marks

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. What is a system call?
2. Differentiate absolute path from relative path.
3. What is spooling?
4. Define shadowing and mirroring.
5. Explain Process Control Block.
6. What is the purpose of Inter Process Communication?
7. What do you mean by multiprogramming?
8. What is pre-paging?

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. Discuss the critical section problem, solving the Dining philosophers' problem using semaphores.
2. What are the functions of a Process Management System? Explain.
3. Explain Segmentation with paging.
4. Write about FCFS scheduling and Round Robin Scheduling.