



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)

BCA-II 2nd YEAR 3rd SEMESTER ASSIGNMENT

Last Date of Submission: 15 Jan. 2014

Course Title: Operating System

Course Code: BCA-10

Year: 2013-14 Summer

Maximum Marks: 40 Marks

Section 'A'

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 Operating System? Explain the concept of time sharing.
2. Differentiate a thread from a process.
3. What is a virtual memory? What are its advantages?
4. State the concept of mutual exclusion.
5. Explain with suitable diagram layered and monolithic operating system structures.
6. Explain concept of swapping with diagram.
7. Differentiate between Pre-emptive and Non-emptive scheduling.
8. What is process? Draw process state diagram and state its meaning.

Section 'B'

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

1. Explain Banker's algorithm for deadlock avoidance with an illustration.
2. What is thrashing? When does it occur? Explain.
3. Explain the various scheduling criteria in evaluating scheduling algorithms.
4. What is Deadlock? Explain concept of critical region and Deadlock handling.