



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)  
उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

MCA-16/MCA-17  
2<sup>ND</sup> YEAR 3<sup>RD</sup> SEMESTER ASSIGNMENT

*Session - 2017-18, Summer Last Date of Submission: 31st October 2017*  
*Session - 2017-18, Winter Last Date of Submission: 30th April 2018*

**Course Title:** Operating System

**Course Code:** MCA-11  
**Maximum Marks:** 30/20

**Section 'A' contains 08 short answer type questions of 4/2.5 marks each. Learners are required to answers 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.**

1. Define Operating System.
2. What are the functions of a Process Management System? Explain.
3. Explain the Producer consumer Problem.
4. What do you understand by deadlock? Explain the characteristic of deadlock.
5. Explain Process Control Block.
6. How does deadlock avoidance is different from deadlock prevention?
7. What is demand paging?
8. What is difference between primitive and non-primitive scheduling?

**Section 'B' contains 04 long answer-type questions of 7/5 marks each. Learners are required to answers 02 questions only.**

1. Discuss the various features of an operating system in details.
2. What is the goal of Scheduling algorithms? Explain the difference between Shortest Job First and Round Robin Scheduling.
3. Define Memory Management. Discuss the various schemes of memory management in details with advantage and disadvantage.
4. With a neat sketch explain the structure of Direct Memory Access.