

Roll No.

97669

**B.C.A. 3rd Semester (New)
Examination – November, 2016
Introduction to Operating System**

Paper-BCA-201

Time : 3 hours Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt **five** questions in all by selecting **one** question from each unit. Q.1 is **compulsory**. All questions carry equal marks.

1. (a) What is real time system ?
- (b) What do you mean by process ?
- (c) What is deadlock ?

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(b) What are the page replacement algorithmic? Explain.

Unit-IV

8. What do you understand by file system structure? Describe the various types of allocation method.

9. What is disk-scheduling? Discuss the following disk scheduling methods with example.

- (a) FCFS
- (b) SSTF
- (c) LOOK
- (d) C-LOOK

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(d) What is swapping ?

(e) What is segmentation ?

(f) What is virtual memory ?

(g) What is Bit-vector ?

(h) What is c-scan ?

Unit-I

2. (a) what is an Operating System? Discuss the services provided by an operating system.

(b) Explain:

(i) Distributed system

(ii) Parallel System.

3. Explain the following :

(a) Threads and their uses

(b) Inter-Process Communication

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Unit-II

4. What do you mean by scheduling ? Explain various scheduling algorithms with example.

5. (a) Differentiate 'deadlock avoidance', 'deadlock prevention' and 'deadlock detection'.

(b) Describe Banker's algorithm.

Unit-III

6. (a) Discuss Logical and Physical address space.

(b) What is thrashing ? What causes thrashing? How do we overcome it? Explain.

7. (a) What do you mean by page replacement ?

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