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Roll No.

BCA-10
Operating System
Bachelor of Computer Application
(BCA-11/16/17)
3rd Semester
Examination, 2019

Time : 3 Hours

[Maximum Marks : 80

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section A contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any three (03) questions only. **(3×15=45)**

1. Discuss Operating System and its types with example.

(2)

2. Explain CPU scheduling. Discuss First Come First Served and Shortest Job First scheduling algorithm with example.
3. Explain in detail the concept of Multiprocessor Operating System.
4. Define memory management in operating system and describe the First Fit, Best Fit, Worst Fit allocation schemes.
5. Define the term deadlock and necessary conditions for the occurrence of deadlock. List out Deadlock prevention techniques.

Section–B

(Short-Answer-Type Questions)

Note : Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only. **(5×7=35)**

1. List out the major functions of Operating System.
2. Differentiate between primitive and non-primitive scheduling.
3. Define and explain the need of System protection with an example.

(3)

4. What is the role of critical section in process synchronization ?
5. Define page Replacement and also describe any one of the page replacement policy.
6. What is file system in operating system and list out various operations performed on file?
7. What is meant by seek time and rotational latency in case of disk drive ?
8. Write short notes on :
 - (a) Cryptography
 - (b) Semaphore