

DE-7042**13**

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2009.

PRINCIPLES OF OPERATING SYSTEMS

(2003 onwards)

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. (a) Define operating system. Give the types of OS. (4)
- (b) Briefly explain about system calls and the operating system structure. (16)
2. (a) What is interprocess communication? Discuss. (10)
- (b) Explain any two process scheduling methods with example. (10)
3. (a) Write short notes on semaphores. (6)
- (b) What are device controllers? Discuss. (14)
4. (a) Describe about interrupt handlers. (10)
- (b) What are the goals of I/O software? (10)
5. (a) Discuss the concept of deadlock detection and prevention. (14)
- (b) Write short notes on paging. (6)
6. (a) Illustrate on multiprogramming without swapping or paging. (10)
- (b) Explain the concept of swapping. (10)
7. (a) Briefly discuss about linked lists and Buddy systems with example. (14)
- (b) Explain any one page replacement algorithm. (6)
8. (a) Write a detailed note on disk space management. (10)
- (b) Illustrate on file system reliability and performance.