

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, MAY 2008.

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) Write note on the functions of an OS. (6)
(b) Explain in detail on system calls and OS structure. (14)
2. (a) Illustrate in detail on critical sections. (10)
(b) Write in detail on process scheduling. (10)
3. (a) Discuss in detail on IPC. (10)
(b) Illustrate in detail on Event counters and Two level scheduling. (10)
4. (a) Discuss the importance of Device controllers. (8)
(b) Explain deadlock detection and Recovery with illustration. (12)
5. (a) Write the Goals of I/O Softwares. (6)
(b) Explain briefly on Interrupt handlers and Device independent I/O Softwares. (14)

6. (a) Explain Multi programming with fixed partition. (10)
- (b) Discuss in detail on segmentation. (10)
7. (a) Discuss with illustration on Linked–lists and Buddy systems. (10)
- (b) Explain Memory Management without swapping on paging. (10)
8. (a) Discuss the importance of file management and write briefly on Directory structures. (10)
- (b) Illustrate in detail on security and protection mechanisms of files. (10)
-