



RE-1904

Third Year B.C.A. (Sem. V) Examination

May / June – 2008

Operating System - II

Time : Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशांशविक लिखनी विगतो उत्तरवदी पर अवश्य लिखनी. Fillup strictly the details of signs on your answer book.	Seat No.:
Name of the Examination :	
T. Y. B.C.A. (Sem. 5)	
Name of the Subject :	
Operating System - 2	
Subject Code No. : 1 9 0 4	Section No. (1, 2,.....) Nil
Student's Signature	

1 Attempt any two from the following : 14

- (i) Describe External and Internal fragmentation. How can this problem be solved?
- (ii) Explain Deadlock and how to solve it?
- (iii) Explain Demand Paging with their advantages and disadvantages in detail.

2 Answer the following : (any two) 14

- (i) Explain various file protection mechanisms used by OS.
- (ii) Explain critical section problem.
- (iii) Explain SSTF Disk Scheduling algorithm with example.

3 Attempt any two from the following : 14

- (i) Discuss various methods for allocation of disk space to files.
- (ii) Discuss various functionalities of OS as a process manager.
- (iii) Describe general model of file management system.

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- 4 Answer the following : 14
- (i) Explain LRU page replacement algorithm 5
 - (ii) Explain the function and role of Device Controller. 5
 - (iii) Discuss differences between a Process and a Program. 4
- 5 Explain the following : (attempt any seven) 14
- (i) Explain Thrashing.
 - (ii) Difference between sequential and Random Access File.
 - (iii) Differentiate between Process and Thread.
 - (iv) List out Memory management functions.
 - (v) What is Dirty bit?
 - (vi) What is Buffering?
 - (vii) What is Device Driver?
 - (viii) What is Virtual Memory?
 - (ix) Differentiate between Deadlock and Starvation.