

Registration no:

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Total Number of Pages: 1

B.TECH
PCCS4304

Sixth Semester (Back) Examination – 2013
OPERATING SYSTEM (NEW)

BRANCH: CSE

Time: 3 Hours

Max marks: 70

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

- Q1 Answer the following questions: (2 x 10)
- a) What is Time Sharing system?
 - b) Define Critical Section Problem?
 - c) What is the purpose of command interpreter?
 - d) What is Dual- Mode Operation?
 - e) What is the main function of the memory-management unit?
 - f) What is Multilevel Queue Scheduling?
 - g) What are the various OS components?
 - h) What is a process state?
 - i) Write the types of system calls of file management?
 - j) Define swapping.
- Q2 a) Describe the differences between symmetric and asymmetric multiprocessing. (5)
- b) What is the purpose of system programs? (5)
- Q3 a) What are the major activities of an operating system in regard to memory management? (5)
- b) What resources are used when a thread is created? (5)
- Q4 Define Semaphores. Explain the Dining-Philosophers Problem with semaphore. (10)
- Q5 a) What is meant by "deadlock"? Elaborate the different approaches that can prevent the occurrence of a deadlock (5)
- b) Explain the difference between internal and external fragmentation. (5)
- Q6 Explain in detail the following disk scheduling strategies with Example FCFS, SCAN & LOOK (10)
- Q7 What is Paging? Explain the basic method of paging with example for a 32-byte memory with 4-byte pages (10)
- Q8 Write Short Notes (Any Two) (5 + 5)
- a) Hierarchical Paging
 - b) Accessing methods of a file

