Code: R7311506

R7

B.Tech III Year I Semester (R07) Supplementary Examinations, May 2013
OPERATING SYSTEMS
(Common to CSS and ECC)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1 (a) Explain the concept of multitasking.
   (b) Explain the special program used to generate a system.

2 (a) With the help of a queueing diagram explain the working of a medium-term scheduling.
   (b) Explain FCFS algorithm with an example.

3 (a) What is race condition? Explain with an example.
   (b) Explain log-based recovery in detail.

4 (a) Explain multi step processing of a user program.
   (b) Give a note on the performance of demand paging.

5 (a) What is safe state? How it is related to deadlock? Explain safe sequence with the help of an example.
   (b) What are the different data structures for Banker's algorithm? What is their significance?

6 (a) What is consistency semantics? Give few examples of consistency semantics.
   (b) What is the difference between reliability and protection of a file system?
   (c) How files are shared in client server model?

7   What are starvation problems in disk scheduling? Which of the disk scheduling algorithms suffer with this problems and why? Is there any exclusion. Justify your answer.

8   Explain the methods, tools and techniques that can be used to improve resistance to threats?

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