

ANNA UNIVERSITY, CHENNAI.

B.E / B.TECH DEGREE EXAMINATIONS, APRIL / MAY, 2012.

CS 9252 - Operating Systems

Semester: Four

Regulation : 2008

Time : 3 Hrs

Max : 100 Marks

Answer ALL questions

PART A (10 X 2 = 20 Marks)

1. Mention one essential feature each of a Time-sharing operating system and a Real-time operating system.
2. List the various components of an operating system.
3. Define a thread. Give one example where multithreading provides better performance than single-threaded solution.
4. List two circumstances under which CPU scheduling takes place.
5. What is a semaphore? What are the operations that can be done on it?
6. What are the necessary conditions for a deadlock to occur in a system?
7. What is meant by external fragmentation? How can that be overcome?
8. What is the working-set model?
9. List the attributes of a file.
10. What are the data structures that can be used to implement a directory?