CSE-3202/OS/6th Sem/2013/M

OPERATING SYSTEM

Full Marks – 100

Pass Marks – 30

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) What is the role of Process Control Block ? Explain the functions of each attribute in PCB. 10

   (b) State and explain different methods of handling deadlock. 10

2. (a) Explain different state of process with the help of state transition diagram. 10

   (b) What is resource allocation graph ? Explain it with suitable example. 10

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3. (a) State and explain different operating system services. 10

(b) Explain in brief Banker's algorithm. 10

4. (a) Define CPU scheduling and its type in detail. 10

(b) Explain in brief various Memory Allocation techniques. 10

5. (a) What is critical region ? Explain in detail. 10

(b) Explain LRU page replacement algorithm with an example. 10

6. (a) State in brief key features of the following operating system : 15

(i) Real Time

(ii) Time sharing

(iii) Embedded

(iv) Distributed.

(b) Differentiate system call and library function. 5

7. (a) Define disk scheduling with example. 10

   (b) Write short notes on the following : 10
      (i) Virtual memory

      (ii) Swapping

      (iii) Thrasing

      (iv) Paging.