Total No. of Questions : 8] *[Total No. of Printed Pages : 2*

 Roll No .....

IT-226

B.E. IV Semester

Examination, June 2017

Choice Based Credit System (CBCS)

Operating System

Time : Three Hours

Maximum Marks : 60

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What is context switching? Discuss different type of scheduler.

   b) Define process states. Draw the diagram of PCB.

2. Write about FCFS scheduling and Round Robin scheduling. Which one is best in which condition. Justify your answer.

3. a) State and explain critical section problem.

   b) Discuss any one classical problem of synchronization.

4. a) Explain the resource-allocation graph algorithm for deadlock detection with relevant diagrams.

   b) Discuss memory management techniques.

5. a) Explain how logical memory address are translated into physical memory address in segmented memory management system.

   b) What are the advantages and disadvantages of contiguous and non contiguous memory location?

6. a) What is thrashing? Discuss any one page replacement algorithm.

   b) Discuss the difference between demand paging and demand segmentation.

7. a) Discuss FCFS scheduling with example. Also discuss the advantages of FCFS.

   b) Write short notes on:

      i) FAT

      ii) I-node

8. a) What is locality of reference and explain its use? What is working set? What is it used for?

   b) Explain virtual memory.

******