

4. a) What is segmentation? Explain in detail

OR

b) What is Demand paging? Explain how it is implemented

5. a) Explain different security models

OR

b) Write about protection in computer systems

6. a) Explain the file system in UNIX

OR

b) What is a multiprocessor operating system?
What are its functions?

[28/II Y/211]

[Aug-11]

**[SPDCA-201]
MCA DEGREE EXAMINATION**

II YEAR

OPERATING SYSTEMS

(Effective from the admitted batch 2009-10)

Time: 3 Hours

Max.Marks: 70

Instructions: All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

SECTION-A

1. Answer any four of the following (4x5=20)

- a) What is an operating system?
- b) What is multiprogramming?
- c) What are semaphores?
- d) What is meant by virtual memory?
- e) What is a deadlock?
- f) What is thrashing?
- g) What is multitasking?

SECTION-B

Answer all questions: (5x10=50)

2. a) What are system calls? Explain in detail

OR

b) Explain the different CPU scheduling algorithms

3. a) Explain the Dining philosophers problem and its solution

OR

b) Explain deadlock detection. Explain how deadlocks can be prevented