D 31093

(Pages : 2)

Name

Reg. No.....

Maximum : 30 Weightage

## THIRD SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2012 (CCSS)

## **BCA**—Core Course

## CA 3B 04--OPERATING SYSTEMS

**Time : Three Hours** 

I. Answer *all* questions.

1 POST is \_

- 2 Multiprocessor systems will have \_\_\_\_\_ processors.
- **3** Name any functionality of OS.
- 4 PCB stands for \_\_\_\_\_
- 5 FCFS is a \_\_\_\_\_\_ scheduling algorithm.
- 6 Semaphore is used for :
  - (a) File management.
  - (b) Device management.
  - (c) Booting.
  - (d) Process synchronization.

7 Name any one page replacement policy.

- 8 Virtual memory = Main memory +
- 9 Name any file systems structure.
- 10 Is it possible to protect a file from modification ? Yes or No.
- 11 Spooling stands for \_\_\_\_\_

12 Name any one of the functionality in Device Management.

## IL Answer all questions.

- 15 What are the various types of Operating System ?
- 14 Define timesharing system.
- 15 What are the various states of a process ?
- 16 What the conditions for the occurrence of deadlock ?
- 17 Discuss about any one of the page replacement algorithms.
- 18 What you mean V demand paging ?
- 19 Discuss about file system structure.
- 20 How the OS manages the free space ?
- 21 What are the techniques for device management ?



 $(12 \times \frac{1}{4} = 3 \text{ weightage})$ 

 $(9 \times 1 = 9 \text{ weightage})$ 

Turn over

III. Answer any five questions.

22 Discuss about distributed systems with examples.

23 Discuss about hardware solution for mutual exclusion problem.

24 How to recover from deadlock ?

25 Discuss about working set principle.

26 Discuss about file system design.

27 Discuss about segmentation.

28 Discuss about any one of the disk scheduling policies.

IV. Answer any two questions.

- 29 Discuss about semaphore with examples for mutual exclusion problem.
- 30 Discuss about the working of paging system in detail.

31 Discuss in detail about any one of the disk scheduling algorithms.

 $(2 \times 4 = 8 \text{ weightage})$ 

 $(5 \times 2 = 10 \text{ weightage})$ 

2,