DL-27 *Your Roll No.....*

BACHELOR OF COMPUTER APPLICATION I YEAR EXAMINATION, 2010

Paper — BCAD-202

OPERATING SYSTEMS

Time : 2½ Hours *Maximum Marks : 70*

(Write your Roll No. at the top immediately on receipt of this question paper.)

Answer all Sections as per instructions given in each Section .

SECTION - A (1 × 10 = 10)

Answer ALL questions.

1. What is the Kernel?
2. What is Spooling ?
3. What is Application Program ?
4. What is a Thread ?
5. What is meant by Context Switch?
6. What is Backing store in operating system?
7. What is Uniprogramming ?
8. What is the Shell ?
9. What are time-sharing systems ?
10. What is Process control block ?

P.T.O.

SECTION - B (6 × 5 = 30)

Answer any SIX questions.

11. Discuss Layered approach to operating system design.

12. Differentiate between multi-tasking, multi-programming and multi-threading ?

13. What are the major activities of an operating system?

14. What are the methods of Deadlock Avoidance and Deadlock Prevention ?

15. What are the benefits of Multiprogramming and Batch processing operating system ?

16. What is turn around time, waiting time, response time and throughput ?

17. What are the various features of UNIX ? What makes UNIX portable and secure ?

18. Differentiate the following:

    a) Physical address space and logical address space

    b) Frames and Pages.

SECTION - C (3 × 10 = 30)

Answer any THREE questions.

19. When does page fault occur ? Describe the actions taken by the operating system when a page fault occurs.

20. Explain how memory allocation system and process allocation is done by an operating system ?

21. What are Schedulers ? What are the various CPU scheduling algorithms ?

22. In the context of memory management, discuss Virtual Memory and Demand Paging ?

23. Write short notes on any *two* the following:

    a) Page Replacement algorithms

    b) Features of WINDOWS

    c) Swapping

    d) Deadlock