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BCA-03

B.C.A. DEGREE EXAMINATION - JANUARY, 2006.

INTRODUCTION TO SYSTEM SOFTWARE

Time: 3 hours

Maximum marks: 75

PART A — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 1. Compare assembler and compiler.
- 2. Write short notes on Lex.
- 3. What are the advantages of virtual memory?
- 4. Explain the dynamic partition memory management scheme in detail.
- 5. What are the features of UNIX?
- 6. Explain the following command.
 - (a) grep (b) sat (c) tr (d) lp (e) man.
- 7. Write a shell script to accept a number and check whether it is prime or not.

PART B — $(5 \times 10 = 50 \text{ marks})$

Answer any FIVE questions.

- 8. Discuss the various phases of a compiler.
- 9. What is an absolute loader? List its features and characteristics.
- 10. What is disk scheduling? Compare any two disk scheduling algorithm.
- 11. How does segmentation differ from paging? Discuss.
- 12. Discuss the following:
 - (a) Demand paging.
 - (b) Swapping.
- 13. (a) Define: (i) User account (ii) Group account
 - (b) Discuss: How to maintain user accounts?
- 14. Write a shell program to do the following.
- (a) Accept a string and check whether it is palindrome.
 - (b) To find sum of digits of a given number.