

PGDCA / MCA (I Yr) / BCA

Term-End Examination

June, 2007

CS-02 (S) : INTRODUCTION TO SOFTWARE

Time : 2 hours

Maximum Marks : 60

Note : Question number 1 is **compulsory**. Attempt any **three** questions from the rest.

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1. (a) Explain all the phases of compiler design in detail. 6
 - (b) Explain Address mapping scheme in a segmented system with the help of a diagram. 6
 - (c) What are the different stages in a SDLC Model ? Explain in detail. 6
 - (d) Write a shell program that counts the number of characters, words and lines in a given file. 6
 - (e) Design an algorithm and draw a corresponding flow chart to convert a Decimal number to its corresponding Binary number. 6
 2. (a) Explain the concept of 'spooling' with the help of a diagram. 4

- (b) What are the various types of file organisation methods ? Discuss their relative advantages and disadvantages. 6
3. (a) Explain dynamic loading and linking with example. 5
- (b) Write a Shell Program to sort the list of numbers given in a file, in ascending order. 5
4. (a) What is GUI ? What are its features ? Also explain its major components with reference to any Windows Operating System. 5
- (b) Define UNIX commands for the following : $5 \times 1 = 5$
- (i) to run a process in background
 - (ii) to list all the files in the current working directory
 - (iii) to create a file using any editor
 - (iv) to copy file1 to file2 in same directory
 - (v) to change the password of a user
5. (a) Name and explain disk allocation methods. Mention their relative advantages and disadvantages. 5
- (b) What are Fourth Generation Languages (4 GLs) ? How are they different from earlier Programming Languages ? Give any two examples of 4 GLs. 5