



TCS-201

Printed Pages : 3

Paper ID and Roll No. to be filled in your Answer Book

Roll No.

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B. Tech.

(SEM. II) EXAMINATION, 2012

**FUNDAMENTAL OF COMPUTER &
PROGRAMMING**

Time : 3 Hours]

[Total Marks : 100

Note : Attempt all questions.

- 1 Attempt any four parts of the following : $5 \times 4 = 20$
 - (a) Define the term computer. What are the different types of computer ?
 - (b) Explain any two character representation codes.
 - (c) How 72.42 will be stored in IEEE 754 standard ?
 - (d) How the different elements of CPU help in execution of a program.
 - (e) Compare and contrast UNIX and windows operating system.
 - (f) Write and explain any five commands of UNIX and DOS separately.

- 2 Attempt any four parts of the following : $5 \times 4 = 20$
 - (a) What is flow chart ? Draw flow chart to find out maximum of three numbers.

- (b) Define algorithm. Write an algorithm to find out the minimum of number from list of integers.
- (c) What are the features of high level language ?
- (d) Explain the different types of programming languages.
- (e) Discuss the salient features of vi editor.
- (f) What is compiler ? Differentiate between compiler and interpreter.
- 3** Attempt any two parts of the following : **10×2=20**
- (a) Explain the different storage classes used in C. Write a small program to show the usage of each one of them.
- (b) (i) Write a program in C to find out whether the given number is prime or not.
(ii) What are the differences between while and do-while loop.
- (c) Write a function in C to swap two characters using call by value and call by reference.
- 4** Attempt any two parts of the following : **10×2=20**
- (a) What is an array ? How the address of any element is calculated in 2D array ? Write a function in C to multiply two matrices.
- (b) How string is stored in C ? Write a program in C to input a paragraph and find out the number of character words and lines used in that paragraph.

- (c) Explain structure. Write a program in C to create a structure called "stud" having roll no, name and percentage as fields. Input atleast 10 data and print the names of students having percentage more than 70% and roll no. even.

- 5** Attempt any two parts of the following : **10×2=20**
- (a) (i) Write a program in C that copies content of one file into another.
(ii) What is pointer to function ? Explain.
- (b) What are merits and demerits of dynamic memory allocation technique ? Write a program in support of your answer.
- (c) Write short notes on :
- (i) Callee
- (ii) Pointer arithmetic
- (iii) Multiple in direction