

Roll No. ....

**24006**

**B. Tech. 1st Semester**

**Examination – December, 2013**

**FUNDAMENTALS OF COMPUTER & PROG. IN 'C'**

**'F' Scheme**

**Paper : CSE-101-F**

**Time : Three hours ]**

**[ Maximum Marks : 100**

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions with at least one question from each section. *Question No. 1 is compulsory.* All questions carry equal marks.

**1. Explain the following briefly:**

**4 × 5**

- (a) Array of pointer
- (b) GUI
- (c) DNS
- (d) Laser printer
- (e) Input/Output Ports

## SECTION – A

2. (a) Differentiate between impact and non impact printers. 10
- (b) Briefly describe the different generations of micro processors. 10
3. (a) What are the different types of operating systems? Explain briefly. 10
- (b) Differentiate between DOS, UNIX and Windows operating system. 10

## SECTION – B

4. (a) Explain the different categories of high level languages in detail. 10
- (b) What are the functions of a loader? Differentiate between a loader and a linker. 10
5. (a) Explain the TCP/IP model and the functions of its different layer using a diagram. 10
- (b) Discuss the various issues related with network security.

## SECTION – C

6. (a) Write a program in C to find the transpose of a matrix of order  $m * n$ . 10
- (b) What is an array? How arrays and strings are related to each other? Explain with example. 10

7. (a) Differentiate between structure and union with the help of an example. 10

(b) How structure within structure is implemented? How can we access members of these structures? 10

### SECTION - D

8. (a) Using pointers write a program in C to find the desired element in an array of N elements. 10

(b) How is dynamic memory allocation done using pointers? 10

9. (a) Write a program in C to count the number of words, characters and lines in a file. 10

(b) What are the various error situations which can occur while dealing with files in C? 10