

Registration No. :

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Total number of printed pages – 2

B. Tech
BCSE 3101

First Year Special Examination – 2014

PROGRAMMING IN 'C'

BRANCH(S) : EEE, ELECTRICAL, ETC, MECH

QUESTION CODE : G 575

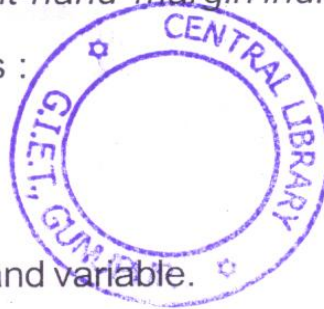
Full Marks – 70

Time : 3 Hours

*Answer Question No. 1 which is compulsory and any **five** from the rest.*

The figures in the right-hand margin indicate marks.

1. Answer the following questions : 2 × 10
- (a) Define relational operator.
- (b) What is an interpreter ?
- (c) Define keyword, constant and variable.
- (d) What do you mean by ternary operator ?
- (e) Write the differentiate between expression and statement.
- (f) Define local and global variable.
- (g) What are the difference between algorithm and flowchart.
- (h) Distinguish between unary and binary operator.
- (i) Define type casting.
- (j) What is the typedef declaration ?
2. (a) Discuss the structure of a C program. Explain with example. 5
- (b) What do you mean by data types? Give examples of data types available in C language. 5



P.T.O.

3. (a) Write a program in C language to find out the sum of first n natural numbers using do while loop. 5
- (b) Write the advantage and disadvantage of for loop over while loop. 5
4. (a) Write a program C to reverse the digits of a number without using library function. 5
- (b) Write a program in C to generate and print prime numbers less than 100.5
5. (a) Write a function in C to convert binary number to its corresponding octal number. 5
- (b) Write a program to find the transpose of a matrix. 5
6. (a) What is recursion ? Write a program to find factorial of a number using recursion. 5
- (b) What are command line arguments ? 5
7. Create a structure named complex to model a complex number and write a program to add two complex numbers using this. 10
8. Write short notes any **two** of the following : 5×2
- (a) processor families
- (b) Evolution of computers
- (c) Storage Classes
- (d) passing parameters by reference.