

I B. Tech I Semester Supplementary Examinations, January - 2020**COMPUTER PROGRAMMING**

(Com. to CE,EEE,ME,CSE,ECE,IT,EIE,ECom E,Aero E,Auto E,Bio-Tech,Chem E,Metal E, Min E, PChem E, PE)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)
 2. Answer the question in **Part-A** is Compulsory
 3. Answer any **FOUR** Questions from **Part-B**

PART -A

1. a) Why computer systems store and handle the data in the form of bits. (2M)
- b) What is the difference between pre-increment and post-increment operation? (2M)
- c) What is the disadvantage with do-while loop statement. (2M)
- d) Define local and global variables. (2M)
- e) What is the importance of NULL character in strings? (2M)
- f) What is a dangling memory? (2M)
- g) How does an append mode is different from a write mode? (2M)

PART -B

2. a) Discuss about low-level, high-level, procedural and object-oriented languages with examples. (7M)
- b) Give the comparison of application and system software. (7M)
3. a) Discuss about different mathematical library functions available in C language. (4M)
- b) Explain the basic data types supported by C language and discuss their features. (5M)
- c) Explain arithmetic operators with examples. (5M)
4. a) Describe the pretest, posttest, counter-controlled and condition-controlled loops with examples. (8M)
- b) Write a C program to illustrate switch and if-else statements. (6M)
5. a) Explain, in detail, storage classes available in C language with examples. (7M)
- b) What is mean by recursion? Explain the purpose of recursive function with an example. (7M)
6. a) Explain different string handling functions with syntaxes. (7M)
- b) Write a program to demonstrate passing an array argument to a function. Consider the problem of finding largest of N numbers defined in an array. (7M)
7. a) What is dynamic memory management? Explain different dynamic memory management functions available in C language. (7M)
- b) Write a program that changes every 5th character of data file into uppercase. (7M)