

Code No: R161107

R16**SET - 1****I B. Tech I Semester Supplementary Examinations, May/June - 2019****COMPUTER PROGRAMMING**

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

Time: 3 hours

Max. Marks: 70

Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)2. Answering the question in **Part-A** is Compulsory3. Answer any **FOUR** Questions from **Part-B****PART -A**

1. a) What is computer hardware and computer software? (2M)
- b) What is associativity and why is it important? (2M)
- c) Give the differences between while and do-while statements. (2M)
- d) What is a static variable? When should it be used? (2M)
- e) Why is the return statement not necessary when function is called by reference? (2M)
- f) How does the C language handle the values in an array internally? (2M)
- g) Why addition of two pointers is impossible? (2M)

PART -B

2. a) Discuss about different computer languages with examples. (7M)
- b) Write an algorithm to calculate the roots of a quadratic equation. (7M)
3. a) Explain arithmetic, logical and bitwise operators with examples. (6M)
- b) What is a library function? What are its uses in C programming? (4M)
- c) What is an integer constant, floating constant and character constant? Give valid examples. (4M)
4. a) Explain about different repetitive statements with examples. (7M)
- b) Write a C program to check whether the given number n is prime or not. (7M)
5. Explain the following storage classes with example: (14M)
 - (i) auto storage class
 - (ii) static storage class
 - (iii) extern storage class
 - (iv) register storage class
6. a) Explain different string handling functions available in C with examples. (7M)
- b) Write a C program to check whether the given matrix is symmetric or not. (7M)
7. a) Explain the command line arguments with an example. (7M)
- b) What is a union? For what kind of applications are unions are useful? Explain the unions with an example. (7M)