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 Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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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 (4M)
       examples.

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 (7M)
       unions with an example.