Code: 15A05101 **R15**

B.Tech I Year I Semester (R15) Supplementary Examinations June 2017

COMPUTER PROGRAMMING

(Common to CE, EEE, CSE, ECE, ME, EIE and IT)

Time: 3 hours Max. Marks: 70

PART - A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Define computer hardware.
(b) List the data types and their sizes of C language.
(c) Give an example of iteration statements in C.
(d) Illustrate with an example, the declaration and initialization of an array.
(e) Discuss any two storage class specifiers.
(f) What are the problems with pointers?
(g) Illustrate the need of structures with an example.
(h) Differentiate between structure and union types.
(i) Write a sample C program to demonstrate the control string of scanf() function.
(j) Discuss the types of streams.

PART - B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

2 (a) Write an algorithm to find the roots of a quadratic equation.
(b) List and explain the various symbols used in flowchart with figures.

OR

3 (a) Write an algorithm to check the given number is perfect number or not.
(b) Explain the bitwise operators and relation operators available in C program.

UNIT - II

4 Discuss selection statements with a suitable example for each.

OR

5 Write a C program for matrix multiplication.

UNIT - III

6 Explain dynamic memory allocation functions of C with a suitable example.

OR

7 Compare call by value with call by reference and explain using a suitable example.

UNIT - IV

8 Write a C program to demonstrate the use of array of structures.

OR

9 What is union? Write a C program to store information in a union and display it.

UNIT - V

10 Write a C program to read name and marks of N number of students from user and store them in a file.

OR

11 Write a C program to demonstrate the use of fscanf and fprintf functions.

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