

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)

- 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.