Code: 13A12101

B.Tech I Year (R13) Supplementary Examinations June 2016

PROGRAMMING IN C & DATA STRUCTURES

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

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: $(10 \times 02 = 20 \text{ Marks})$
 - (a) Write about structure of C program?
 - (b) Draw flowchart to find whether the sum of 2 numbers is odd or even.
 - (c) Write a note on difference between break and continue statements.
 - (d) Write the difference between while and do-while statements.
 - (e) Write four types of storage classes.
 - (f) What is binary search?
 - (g) Write the disadvantage of pointers.
 - (h) Write operations on files.
 - (i) Write difference between structure and union.
 - (j) What is circular queue?

PART - B

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

UNIT - I

What is operator? Explain different operators with examples.

OR

Write about built-in, derived, user-defind and void data types.

UNIT - II

4 Write about categories of functions with examples.

OR

Write a c program to find the *greatest* of given 3 numbers using else – if ladder.

[UNIT - III]

Write about string manipulations functions available in C with examples.

OR

What is 2D array? Write program for addition of 2 matrices.

UNIT - IV

8 Explain structure declaration in C. How we can use different Ways of declaring Structure using Typedef?

OF

9 Write about dynamic memory management functions in C.

UNIT - V

10 Define stacks and explain stack implementation concepts using arrays.

OR

Write a suitable program to implement Single linked list.
