

Subject Code: R13105/R13

Set No - 1

I B. Tech I Semester Supplementary Examinations May/June - 2016 COMPUTER PROGRAMMING

(Common to CE, ME, CSE, PCE, IT, ChemE, AeroE, AME, MinE, PE, MetalE, Textile Engg.) Time: 3 hours Max. Marks: 70

> Question Paper Consists of Part-A and Part-B Answering the question in **Part-A** is Compulsory, Three Questions should be answered from Part-B ****

PART-A

- 1. (a) What is a algorithm? What is flow chart? List the difference between them.
 - (b) Write a program to print numbers from 1 to 100 using while loop.
 - (c) What is recursion? Write a program to find factorial of a number using recursion.
 - (d) What is dangling memory?
 - (e) What is a self referential structure?
 - (f) What is a file? List Formatted I/O functions.

[4+4+4+3+3+4]

PART-B

- 2. (a) Explain different computer languages.
 - (b) Explain basic data types and their sizes.

[8+8]

- 3. (a) Explain multi-way selection statements with example.
 - (b) Write a C program to multiply given two matrices.

[8+8]

- 4. (a) Explain the following storage classes with example Eiles Ranker
 - (i) extern
 - (ii) auto
 - (iii) register
 - (iv) static
 - (b) Explain the following
 - (i) Header files
 - (ii) C preprocessor

[8+8]

- 5. (a) What is a pointer? Explain address arithmetic with example.
 - (b) Explain dynamic memory management functions with example.

[8+8]

- 6. (a) Explain the meaning and purpose of the following
 - (i) Template (ii) Tag (iii) sizeof (iv) struct
 - (b) What is structure? Explain array of structures with example.

[8+8]

- 7. (a) Explain the following high level I/O functions
 - (i) fopen()
 - (ii) fclose()
 - (iii) getw()
 - (iv) putw()
 - (b) Two files DATA1 and DATA2 contain sorted lists of integers. Write a program to produce a third file DATA which holds a single sorted, merged list of these two lists.

[8+8]