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
  - (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]

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