## 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

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
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## 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.

## PART-B

2. (a) Explain different computer languages.
(b) Explain basic data types and their sizes.
3. (a) Explain multi-way selection statements with example.
(b) Write a C program to multiply given two matrices.
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
5. (a) What is a pointer? Explain address arithmetic with example.
(b) Explain dynamic memory management functions with example.
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.
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.
