## B.Tech I Year (R07) Supplementary Examinations, December 2012

## **COMPUTER PROGRAMMING**

(Mechanical Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain various relational operators with suitable examples.
  - (b) Write and explain the structure of a C program.
- 2 (a) Distinguish between while and do while loops.
  - (b) Write a C program to find the Fibonacci sequence of a number.
- 3 (a) Define a function. Explain the various components of a function with an example.
  - (b) Explain the automatic and extern storage classes with examples.
- 4 (a) What is an array? Explain the one dimensional arrays in detail.
  - (b) Write a C program to add two matrices.
- 5 (a) Explain with a suitable example, how to assign and access the structure values.
  - (b) Give brief description about array of structures.
- 6 Explain the different file operations with their syntax and examples.
- 7 (a) What is a stack? Explain the various methods of storing the stacks in memory.
  - (b) Give brief description about the bubble sort technique.
- 8 (a) Define the following terms:
  - (i) Node (ii) Parent (iii) Root (iv) Height (v) Degree.
  - (b) Explain the inorder tree traversal mechanism with suitable example.

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