**Code: R7100307**

**R07**

B.Tech I Year (R07) Supplementary Examinations December/January 2015/2016
**COMPUTER PROGRAMMING**
(Mechanical Engineering)
(For 2008 Regular admitted batch only)

Time: 3 hours                                                             Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

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1  (a)  Explain basic structure of C program with general characteristics of C language.
   (b)  Enumerate the steps involved in evaluating expressions using precedence of operators.

2       What are the different types of control statements available in 'C' and explain them with an example.

3  (a)  Explain in detail about pass by value and pass by reference with example program.
   (b)  Distinguish between the following:
        (i) Actual and formal arguments.
        (ii) Global and local variables.
        (iii) Automatic and static variables.

4  (a)  Define an array. What are the different types of arrays? Explain.
   (b)  What is a pointer? List out the reasons for using pointers.

5  (a)  Define structure and write the general format for declaring and accessing members.
   (b)  Distinguish between an array of structures and an array within a structure. Give an example for each.

6  (a)  Explain the way of defining, opening and closing a file.
   (b)  Distinguish between text mode and binary mode operation of a file.

7       Declare a queue of integers. Write functions:
   (a)  To insert an element in to queue.
   (b)  To delete an element from queue.

8       List and explain the basic operations on graphs with examples.

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