R09

I Year B.Tech(R09) Supplementary Examinations, December 2010.
PROGRAMMING IN C AND DATA STRUCTURES
(Common to All Branches)

Time: 3 hours   **Max Marks: 70**

Answer any FIVE questions
All questions carry equal marks
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1. (a) Explain the advantages and disadvantages of using high level languages over machine level languages.

   (b) What is in Integrated Development Environment(IDE).Explain its features.

2. (a) What is the difference between '=' and '=='. Explain with examples.

   (b) What is loop? Why it is necessary in the program? Explain with example.

3. (a) Write a program to read the elements in an array and print the same in reverse order.

   (b) How are multidimensional arrays declared and initialized?

4. (a) What is pointer to a pointer? What is a void pointer? Explain with example.

   (b) Write a program to add two matrices using pointers.

5. Write a program in C that defines a structure employee containing the details such as empno, empname, department name and salary. The structure has to store 20 employees in an organization. Use the appropriate method to define the above details and define a function in a structure that will display the contents?

6. Discuss with examples the following file I/O handling functions.

   (a) fgets()

   (b) fputs()

   (c) getw()

7. (a) Discuss the various ways how deletions can be done in singly linked list. Give an example for each.

   (b) Discuss the various ways how insertions can be done in singly linked list. Give an example for each.

8. Explain merge insertion sort and sort the following numbers using the same.
   31 28 17 65 35 42 86 25 45 52

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