9199/A12 **OCTOBER 2010**

PROGRAMMING IN C

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Explain how a character is read and write with an example.

2. Explain the rules for using "scanf" statement.

3. What are the steps involved in writing a function?

4. Explain the concept of function reference.

5. Explain how a array is declared with suitable example.

6. Explain the rules for pointer operations.

7. Explain how the structure is initialized, give an example.

8. How does a union differ from structure?

9. Explain the two different categories of data files.

10. What will be the output of the following programs

```
main ( )
{
        File fp;
        fp = fopen ("TRIAL.E", "r");
        fclose (fp)
}
```

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Describe the four basic data types. How could we extend the range of values they represent?

12. Explain the different types of storage variables.

13. Write a C program to reverse the string.

14. Explain two-dimensional arrays with example.

15. Explain array of structure with example.

16. Write a C program to create a file name "Employee.dat", which stores details like name, age and basic salary of the employee.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Explain the precedence of arithmetic operators with suitable example.

18. (a) Write a program to count number of vowels, consonants and other characters in a sentence.

    (b) Explain string handling functions with examples.

19. (a) Write a C program to demonstrate structure within structure.

    (b) Explain Random access to files and the operations of fseek function.

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