OCTOBER 2011

P/ID 17453/ RCC/PCAE

Time : Three hours Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) Discuss the following:

(i) Operator precedence

(ii) Associativity

Or

(b) Explain the role of the 'while' statement in C using simple C statements.

2. (a) What is the scope and life time of automatic variables in functions?

Or

(b) Explain the method of accessing a variable through its pointer using simple C statements.

3. (a) Write a simple C program outline to explain the difference between passing by value and passing by reference when passing an argument to a function.

Or

(b) Name the four different storage class specifications in C. Also briefly discuss about static variables.

4. (a) What is a self-refrential structure? mention its use.

Or

(b) Summarize the special preprocessor operators * and **. What is the purpose of each?

5. (a) Write a program to illustrate the output of integer numbers under various formats.

Or

(b) Briefly discuss about the method of defining and opening a file.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

6. Explain in detail the process of type conversion in expression.

7. What is a function prototype? How do function prototypes differ from traditional function declaration?

8. Write a program to illustrate the concept of passing pointers to a function.

9. Write a program to explain the concept of processing a two-dimensional array.

10. What is dynamic memory allocation? Explain how does it help in building a complex program.

11. Write a program to explain the method of accessing a pointer variable whose object is a structure variable.

12. Briefly discuss about macros.

13. Explain about command line arguments in C.

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