

Roll No.

Total Pages : 3

MCA/D-17

10309

PROGRAMMING IN C

Paper : MCA-14-11

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *five* questions in all, selecting *one* question from each unit. Question number 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Answer the following in short :

- (a) What do you understand by short circuit operations?
- (b) What is the difference between prefix and postfix ++ operator?
- (c) What do you understand by header file?
- (d) What is the difference between write mode and append mode to open a file?
- (e) What is dynamic memory allocation?

UNIT-I

- 2. (a) What do you understand by associativity of operators? Discuss the operators in C having right to left associativity.
- (b) What are the different types of Integers in C? Discuss.

3. (a) Compare the different storage classes in C on the basis of different parameters like scope, life time, default value etc.
- (b) Differentiate between << and >> operators using suitable example.

UNIT-II

4. (a) What is recursion? Write a program in C to perform binary search using recursion.
 - (b) What is the difference between entry controlled and exit controlled loops? Explain using suitable examples from C language.
5. Write a program in C to print the numbers from M to N excluding prime numbers where M and N are two integers and M is less than N. Make the use of function and continue statement.

UNIT-III

6. (a) What is pointer? Write a note on pointer arithmetic.
 - (b) Write a function in C to replace all odd numbers by zero and even by one in a two dimension array.
7. What is a string? Write a function to count the total number of vowels and consonants in a string.

UNIT-IV

8. (a) What is the difference between a struct and union?
Explain using suitable examples.
- (b) What is macro? What is the use of them? Discuss.
9. What is a file? Write a program in C to replace all lower case character by upper case in a text file.

