

GSE/D-22

1166

PROGRAMMING IN C

BCA-116

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) What is the role of comments ? How comments can be written in C ?
- (b) Differentiate between getch(), getche() and getchar().
- (c) Differentiate between break and continue.
- (d) What is recursion ?
- (e) Why goto statement should be avoided in a program ?
- (f) How arrays can be initialized ?
- (g) What is meant by typecasting ?
- (h) How can you declare a string in C ? $8 \times 2 = 16$

Unit I

2. (a) Explain various data types in C. 8
- (b) Explain structure of a C program using suitable example. 8
3. (a) What is the difference between constants and variables ? How can we declare constants in C ? Explain using suitable examples. 8
- (b) Explain various I/O functions in C using suitable examples. 8

Unit II

4. Describe various operators in C along with their hierarchy and associativity. 16
5. (a) Write a program in C to find greatest among three numbers. 8
- (b) Discuss switch statement with the help of suitable examples. Also discuss all the possible cases in switch statement. 8

Unit III

6. (a) Write a program in C to find the sum of the digits of the input number. 8

(b) What do you understand by function ? Explain the various benefits of using functions. 8

7. Describe various types of loops in C with the help of suitable examples. 16

Unit IV

8. Explain various storage classes in C in detail. 16

9. What do you mean by array ? Explain various types of arrays in detail. Write a program in C to biggest of n numbers. 16