

Roll No.DC 31.....

Exam Code : J-22

Subject Code—56822

B. Sc. EXAMINATION

(Batch 2018 Onwards)

(Main & Re-appear)

(Second Semester)

COMPUTER APPLICATIONS

CCaL-205

Programming in 'C'

Time : 3 Hours

Maximum Marks : 80

Note : Q. No. 1 is compulsory. Out of remaining eight questions (divided in 4 Units), attempt *four* questions by selecting either *one* question from each Unit or by selecting *two* questions from any one Unit and remaining *two* questions from two different Units out of remaining three Units.

(1-11-27-0622) J-56822

P.T.O.

(Compulsory Question)

1. (i) What do you mean by debugging ?
- (ii) What are the advantages of a good documentation ?
- (iii) What do you mean by casting of data ?
- (iv) Why the use of 'goto' statement is avoided in 'C'.
- (v) What is symbolic constant ?
- (vi) Briefly explain the purpose of function in 'C'.
- (vii) Differentiate between putchar() and puts() functions.
- (viii) Assume $x = 01010101$. Find value of x after following statement is executed :
- (a) $x \ll 3$
- (b) $x \gg 3$ $2 \times 8 = 16$

Unit I

2. (a) Write an algorithm for Binary Search. 8
(b) Describe program development cycle. 8
3. (a) Explain various methodologies of structured programming. 8
(b) What are flow charts ? Draw a flow chart to find whether a given number is even or odd. 8

Unit II

4. (a) Explain getch(), getche() and getchar() functions. 8
(b) Explain unary operators available in 'C' by giving example. 8
5. (a) Explain bitwise operators used in 'C' with example. 8
(b) Discuss about output functions available in 'C'. 8

Unit III

9.

6. (a) What is nested if statement ? Draw control flow diagram of nested if. Write a program to find the largest number among three numbers using nested if statement.
- (b) Differentiate between break and continue statement.
7. (a) Explain type cast operator and Built-in conversion function available in 'C'.
- (b) Write a program in 'C' to find roots of quadratic equation.

Unit IV

8. (a) What are different types of storage classes used in 'C' ? Explain.
- (b) What are the actual and formal parameters ? Explain with example.

9. (a) Write a program to find the transpose of a matrix. **8**
- (b) Explain the concept call-by-value and call-by reference with example. **8**