Total No. of Questions : 9] [Total No. of Printed Pages : 4

(1106)

B.C.A. UG (CBCS) RUSA Ist Semester Examination

3610

C-PROGRAMMING

BCA–104

Time : 3 Hours] [Maximum Marks : Regular : 70 / ICDEOL : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/ continuation sheet will be issued.

Note :– Attempt *five* questions in all. Question No. 9 is compulsory. Rest, attempt *one* question each from each of the Unit-I to Unit-IV.

Unit–I

1. Write a small program in C and define its structure and constructs. 14(20)

Or

2. Define the following terms giving examples in 'C' language :

   (i) Character set in 'C'

(ii) Identifiers in 'C'

(iii) Constants and variables

(iv) Arrays

(v) Declaration of a variable

(vi) Expression

(vii) Statement

2×7=14
(20)

Unit–II

3. (a) Discuss various types of relational operators. Give examples of each type. 7(10)

(b) What are library functions ? How are these different from user defined functions ? 7(10)

Or

4. (a) Explain various options/ways available in 'C' for different types of inputs in 'C'. Give examlpes of each type of statement also. 7(10)

(b) Write a small program in 'C' to input values of three variables : one of 'int' type, one of 'float' type and one of 'char' type from the user. Print these values on three different lines on the screen. 7(10)

Unit–III

5. What are control statements ? What is their role ? Explain branching, looping and nested control statements giving appropriate examples. 14(20)

Or

6. Write a program in 'C' to accept the following from the user for 10 students : 14(20)

   (a) Marks obtained (total)

   (b) Maximum total marks

   Using the 'switch ..... case' statement, print the grade of each student on the screen according to the following criterion :

(a)	Marks > 80,	Grade 'A'
(b)	70 ≤ Marks ≤ 80	Grade 'B'
(c)	60 ≤ Marks ≤ 69	Grade 'C'
(d)	50 ≤ Marks ≤ 59	Grade 'D'
(e)	40 ≤ Marks ≤ 49	Grade 'E'
(f)	Marks < 40	Fail

Unit–IV

7. (a) What are functions ? How do you define these in 'C' ? Explain how are the arguments passed onto the functions. 10(14)

   (b) Explain recursion. 4(6)

Or

8. Write a program in 'C' using functions to swap the values of two string constants. 14(20)

Unit–V

9. Answer the following :

   (a) Explain the 'printf ()' statement in 'C' 2(4)

   (b) Discuss the precedence of arithmetic and logic operators. 3(4)

   (c) Differentiate between 'do ..... while' and 'do' loops. 3(4)

   (d) What are the characteristics of arrays ? Explain. 3(4)

   (e) How is a 3 dimensional array defined ? 3(4)