Diploma Board Examination – February 2022

Course: Diploma in Electronics and Communication Engineering.

Subject : Programming In 'C'.   **QP Code: 835**

Time: 3 Hours   **Sub Code: 4040330**   **Max. Marks: 100**

[N.B: (1) Answer all 10 Questions in PART A and each question carries 3 Marks.

(2) Answer division (a) or division (b) of each question in PART B and each question carries 14 marks.]

PART – A

1. What is flow chart? Give any three flow chart symbols with their meaning.

2. List out the steps involved in executing a C program briefly.

3. Define conditional operator with example.

4. State the hierarchy rules in evaluating an expression.

5. How the character array is initialized in C program? Give an example.

6. How the elements of a matrix are read in C program?

7. Which operator is used to access the structure member? Write the syntax.

8. What are the advantages of union?

9. List header files having the library functions.

10. State any three library functions used in mathematical calculations.

PART – B

11. (a) (i) List the features of C languages.
          (ii) Explain the key words in C program.

(Or)

   (b) Explain formatted output statements with example.

12. (a) Explain looping statements with example.

(Or)

[Turn over…..

(b) (i) Write a C program to find the sum of series using while loop

$$Sum = 1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{6} + \cdots + \frac{1}{n}$$

(ii) Explain go to and break statements in C program.

13. (a) (i) Explain the strcpy function with example.
    (ii) Write a C program to read and print a matrix.

(Or)

(b) Explain strlen, strcmp and strcat functions in C with example program.

14. (a) Create a structure called student with members Reg.no, age and gender. Assign values to the members and print the values.

(Or)

(b) Explain union with example.

15. (a) (i) Explain call by value.
    (ii) Explain any five character oriented functions in C program.

(Or)

(b) (i) Write a C program to find factorial of given N numbers using functions.
    (ii) Write a program to add two numbers using functions with arguments and return values.