C940

Total Pages : 3   Roll No. ....

ESC-506

Computer Programming-II

M.Sc. Environmental Science (MSCES-20)

2nd Semester Examination, 2022 (June)

Time : 2 Hours]   **Max. Marks : 40**

Note : This paper is of Forty (40) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION–A
(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Ten (10) marks each. Learners are required to answer any Two (02) questions only.

(2×10=20)

1. What is an array? How to declare and initialize 1-D, 2-D array? Explain with suitable examples.

2. What is an Object Oriented Programming? Define the characteristics of Object Oriented Concept.

3. Write a C program that defines a structure employee, containing the details such as empno, empname, department name and salary. The structure has to store 20 employees in an organization. Use the appropriate method to define the above details and define a function that will display the contents.

4. List out the differences between unions, structures and arrays.

5. Define a class named 'Train' representing following members:

Data members:

- ➢ Train Number
- ➢ Train Name
- ➢ Source
- ➢ Destination
- ➢ Journey Date
- ➢ Capacity

Members Function :

- ➢ Input Train data
- ➢ Display data

(a) Create a class using C++ Programming Syntax.

(b) Write a C++ program to test the train class. All possible input-output values you can assume.

SECTION–B
(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Five (05) marks each. Learners are required to answer any Four (04) questions only.   (4×5=20)

1. Explain scanf() and printf() function in 'C' language with syntax and examples.

2. Explain any two pre-processor directives in 'C' language.

3. Write a program to swap two numbers using call-by-reference method.

4. How can C++ Programming contributes to helps the environment? Explain it with your own concept.

5. Write a suitable example to show the inheritance concept of Object oriented programming.

6. What is prototype function in 'C programming? What are the needs to create a function in the programming language?

7. What is the syntax of for loop? Explain the for loop with suitable example.

8. What is variable? What are the rule and role of variables in 'C' programming language?