MCA (2019 Batch)   (Sem.–1)
OBJECT ORIENTED PROGRAMMING IN C++
Subject Code : MCA-102
M.Code : 26043

Time : 3 Hrs.   **Max. Marks : 100**

INSTRUCTION TO CANDIDATES :
1. **SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students have to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. Compare functional and OOP approaches in detail and explain the salient concepts of OOP.

2. What are the various data types available in C++? Explain giving suitable examples.

SECTION-B

3. Define Recursion. How does recursion work in C++? Write a recursive program in C++ to find the factorial of a number.

4. What are the various storage classes available in C++? Explain with the help of examples.

SECTION-C

5. Explain the role of constructors and destructors in C++. Distinguish between default and copy constructor and explain whether constructors and destructors can be overloaded or not.

6. Define Inheritance. What are the various types of inheritances? Discuss each giving suitable examples.

SECTION-D

7. Define functions overloading. What are the complicacies involved in use of default parameters in overloaded functions? Explain.

8. Discuss in detail exception handling in C++.

SECTION-E

9. **Write briefly :**

   a. What is the difference between class and object?

   b. What do you mean by operator precedence?

   c. What is the difference between function overloading and overriding functions?

   d. What are container classes?

   e. What is the difference between structure and union?

   f. What are friend functions?

   g. What do you mean by dynamic memory allocation?

   h. What is an abstract base class?

   i. What do you mean by Polymorphism?

   j. How is a File declared in C++?

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC against the Student.