

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ECE)(Sem.-3)
ORIENTED PROGRAMMING**

Subject Code :BTCS-305

M.Code : 96259

Date of Examination : 06-12-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a. Define OOP.
- b. Define static data member.
- c. How we declare an object of class?
- d. What is purpose of streams in C++?
- e. Why do we need constructor?
- f. Define operator overloading.
- g. What is multiple inheritance?
- h. Define early binding.
- i. What is exception handling?
- j. Define a file stream in C++?

SECTION - B

2. Discuss the differences between procedure-oriented programming and object-oriented programming.
3. What is constructor? Create a simple plan for a class Student with a constructor and a function to compare marks of two students.
4. Discuss the need of type conversion (from basic to class type, class type to basic and class to another class type).
5. Discuss different types of inheritance in C++ using code snippets.
6. Discuss the role of dynamic memory management in C++.

SECTION - C

7. Explain different concepts of object - oriented programming with the help of examples.
8. What is operator overloading? Write a program to overload the binary '*' operator and unary '++' operator.
9. **Write a short note on :**
 - a. Pure virtual functions.
 - b. Generic Programming

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.