

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(AIML/ CSE/DS/Internet of Things and Cyber Security including
Block Chain Technolog) (Sem.-3)**

OBJECT ORIENTED PROGRAMMING

Subject Code : BTCS302/18

M.Code : 76437

Date of Examianation : 15-06-2024

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. **Answer briefly :**

- a) Discuss different data types in C++.
- b) Define class and object.
- c) What are function components?
- d) Write about this pointer.
- e) What is meant by friend function?
- f) Write use of `fstream`.
- g) Discuss virtual base class.
- h) Discuss dynamic allocation.
- i) What is the use of abstract class?
- j) What is early binding?

SECTION-B

2. Write a C++ program to show opening and closing of files.
3. Explain the concept of dynamic allocation of objects.
4. What is function overloading? Write an example using C++?
5. What are virtual functions? Explain with an example.
6. What are constructors? Write its different types.

SECTION-C

7. Explain public, private and protected and show how they are declared in Inheritance.
8. What is the use of operator overloading? Write an algorithm to illustrate its concept.
9. Give the fundamentals of Exception Handling? Explain the use of throwing and catching mechanism.

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.