

B.Tech. III Sem. (Main) Examination, April/May - 2022
Artificial Intelligence & Data Science
3AID4-06 Object Oriented Programming
AID, CAI, CS, IT

Time : 3 Hours**Maximum Marks : 70****Instructions to Candidates:**

Attempt all ten questions from Part A. All five questions from Part B and three questions out of Five questions from Part C.

Schematic diagrams must be shown wherever necessary. Any data missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination (As mentioned in form No.205)

PART - A

(Word limit 25)

(10×2=20)

1. What is the difference between struct and class in C++?
2. How do you declare a member function in C++?
3. Define constructor in C++?
4. Why inline function is used?
5. What is an abstract class?
6. Can we create object of virtual class in C++?
7. What are static data member in C++?
8. Define Polymorphism?
9. Define function templates?
10. What are the three file stream classes?

PART - B

(Word limit 100)

(5×4=20)

1. What do you mean by exception handling? Explain the four steps of exception handling?
2. What do you mean by friend function in C++?
3. Explain function overriding in C++ with example?
4. Explain Dynamic binding with example.
5. What is OOP? Explain its characteristics.

PART - C

(Any Three)

(3×10=30)

- 1. Define class? How can we define member function inside and outside the class in C++? Explain with suitable example.**
 - 2. Explain :**
 - a) new and delete operators.**
 - b) inline function.**
 - 3. What is inheritance? Explain the types of inheritance? Write a program to add two numbers using multiple inheritance in C++?**
 - 4. What is operator overloading? Explain unary and binary opertor overloading in C++ with suitable example?**
 - 5. How exception are handled in C++ programming explain with program?**
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