



RAN - 2111040101020002

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M. C. A. (Sem. - I) Examination April - 2025

Object Oriented Programming Methodology (Paper - 102)

Time: 3 Hours]

[Total Marks: 70

સૂચના : / Instructions

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નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:
☛

Name of the Subject :
☛

Subject Code No.:

Seat No.:

- Q. 1. A.** Explain difference between cout and printf in brief. **02**
- B.** How can we allocate memory dynamically in C++? Explain with suitable example. **05**
- OR**
- B.** How pointers are useful to access an Array type in C++? Explain in detail with example. **05**
- C.** Explain special characteristics of Class type in C++. **07**
- Q. 2. A.** Is it possible to create a static friend function? Justify your answer with suitable arguments in detail. **07**
- B.** What is default constructor? In which situation should we use it? Explain with example. **05**
- OR**
- B.** Explain inline function in C++. Also explain its limitations. **05**
- C.** What is data encapsulation? **02**
- Q. 3. A.** What is multiple inheritance? Explain issues while using it in a C++. **06**
- B.** Explain importance of virtual function in dynamic polymorphism. **05**
- OR**
- B.** Explain importance of data hiding for inheritance. **05**
- C.** List out rules of Abstract class with a small example. **03**

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- Q. 4. A.** Explain importance of exception order while execution of catch block with example. **07**
- OR**
- A.** Write a sample code to manage a text file using C++ inbuilt classes. **07**
- B.** What is Exception? Why we need it? How to use it in a C++ application? **05**
- C.** List out various file operation modes and its usage in brief. **02**
- Q. 5. A.** What is Template class? How to create and use it in an application development? **06**
- OR**
- A.** Explain any two standard template library functions in detail with example. **06**
- B.** How to write a parameterized constructor for a Template class? What issues it may have while instantiating it? **05**
- C.** Explain Iterators in brief with example. **03**
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