

QP CODE: 24800759



Reg No : .....

Name : .....

**IMCA DEGREE EXAMINATION , FEBRUARY 2024**

**Second Semester**

Faculty of Technology & Applied Science

Integrated MCA

**CORE - IMCA2C05 - OBJECT ORIENTED PROGRAMMING WITH C++**

2020 Admission Onwards

05DF0314

Time: 3 Hours

Maximum: 75 Marks

**Part A**

*Answer any **ten** questions*

*Each question carries **3** marks*

1. When will you make a function inline? Why?
2. Explain the purpose of this pointer.
3. Write about the functions used to find length of a string.
4. Write the syntax for creating a destructor.
5. What is a pointer? Explain its usage.
6. How to declare a pointer to objects.
7. What are the rules for overloading operators?
8. Write about conversion between objects and basic type.
9. Write a simple cpp program illustrating the concept of multilevel inheritance.
10. Write a simple cpp program to access a virtual member function.
11. What is file? What are the steps involved in manipulating a file in a cpp program?
12. Explain the exception handling model of cpp with various construct supported by it.

(10×3=30 marks)





## Part B

Answer **all** questions

Each question carries **9** marks

13. a) Explain in detail about the access specifiers used in a class with examples.

OR

b) Explain with examples the purpose of a friend function and an inline function.

14. a) With relevant examples discuss constructors with and without parameters.

OR

b) Explain about operators new and delete with appropriate examples.

15. a) What is static polymorphism? Explain how it is implemented with examples.

OR

b) Explain in detail the different types of conversion in cpp.

16. a) Explain virtual base classes. Write a program to implement the concept of virtual base classes.

OR

b) Explain the concept of inheritance and member accessibility.

17. a) Write program which copies the contents of one file to a new file by removing unnecessary spaces between words.

OR

b) Explain class templates. Explain the syntax of class templates with suitable example.

(5×9=45 marks)

