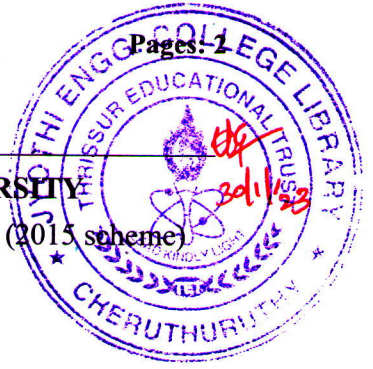


Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
 Fifth Semester B.Tech Degree (S,FE) Examination January 2023 (2015 scheme)

**Course Code: MR363****Course Name: OBJECT ORIENTED PROGRAMMING**

Max. Marks: 100

Duration: 3 Hours

**PART A***Answer all questions, each carries 5 marks.*

- |   |  |   |
|---|--|---|
| 1 | How a const function helpful in C++ program?                                 | 5 |
| 2 | Compare local class and nested class with syntax                             | 5 |
| 3 | Illustrate the use of explicit constructor                                   | 5 |
| 4 | Compare any two type of try- catch paradigm                                  | 5 |
| 5 | How can you prevent by creating multiple base classes in hybrid inheritance? | 5 |
| 6 | Define RTTI with an Example.   | 5 |
| 7 | How a file I/O operation can be done with C++. Explain its steps             | 5 |
| 8 | Explain the use of namespace.  | 5 |

**PART B***Answer any three questions, each carries 10 marks.*

- |    |  |    |
|----|--|----|
| 9  | Write the use of Friend Function. Write down its syntax. Apply friend function for accessing members of a Class with an Example. | 10 |
| 10 | Write a program to find sum of squares of first N odd Number   | 10 |
| 11 | Differentiate constructor and destructor with proper examples.   | 10 |
| 12 | Explain binary operator overloading with member function   | 10 |
| 13 | Elaborate the usage of exception specification with suitable example   | 10 |

**PART C***Answer any two questions, each carries 15 marks.*

- |    |  |    |
|----|--|----|
| 14 | a) Explain different type of inheritance with real-time example. | 10 |
|    | b) What is the need of abstract class in C++?                    | 5  |

- 15 a) List out the different types of polymorphism available in C++. 3  
b) Compare function overloading and function overriding with an example. 8  
c) What is the process of dynamic casting? 4
- 16 a) Explain how serialization objects achieved in C++? 9  
b) Illustrate the file handling using file streams. 6
- 17 a) How many ways a namespace can be added to the program? 7  
b) List and explain any 5 manipulator function in C++. 8