



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

**MAT 1422/3638/1542/1322/1522      Object Oriented Programming in C++**

**Max Marks: 75**

**Time: 3 Hrs.**

### PART A

**Answer any FIVE questions:**

**(5 x 15 = 75)**

1. What the concepts are of object oriented programming? Explain in detail.
2. (i) What are the principles of function overloading?  
(ii) Write a C ++ program to find the area of the circle , rectangle and triangle using function overloading.
3. (i) Differentiate between do-while loop and while loop on the basis of syntax.  
(ii) Write a C ++ program to calculate root of quadratic roots of quadratic equations by initializing the object using default constructors.
4. (i) State any two forms of inheritance. Give an example of each.  
(ii) Demonstrate hybrid inheritance with the help of suitable example.
5. (i) Explain about file manipulators.  
(ii) Write about adaptors in C ++?
6. Discuss about formatted console I/O operation and unformatted console I/O operations.
7. (i) Explain about static classes.  
(ii) What happens if we declare all member functions as private in a class?

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