

II B. Tech I Semester Supplementary Examinations, July - 2022
OBJECT ORIENTED PROGRAMMING THROUGH C++
 (Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions each Question from each unit
 All Questions carry **Equal** Marks

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| 1 | a) Explain the principles of Object Oriented Programming. | [7M] |
| | b) Give the structure of a C++ Program. | [7M] |
| | Or | |
| 2 | a) How data and functions are organized in Object Oriented Program? Explain with an example. | [7M] |
| | b) Compare the features of C programming language to that of C++ programming language. | [7M] |
| 3 | a) What is the difference between inline member function and volatile member function? Give examples. | [7M] |
| | b) Write a C++ program to overload area () function to calculate area of shapes like triangle, square, circle. | [7M] |
| | Or | |
| 4 | a) What are the methods used to pass an argument to a function? Explain with Examples. | [7M] |
| | b) Write a C++ program to declare object and display their contents. | [7M] |
| 5 | a) Give the rules for operator overloading. Discuss an example. | [7M] |
| | b) Describe the concept of Volatile member function. | [7M] |
| | Or | |
| 6 | a) Write a C++ program to implement multiple inheritances with public access specific. | [7M] |
| | b) Write about C++ Operator Overloading working example. | [7M] |
| 7 | a) How virtual functions can be used to implement runtime polymorphism? Describe. | [7M] |
| | b) With an example explain how late binding can be achieved in C++. | [7M] |
| | Or | |
| 8 | a) What is virtual base class? Write a C++ program illustrating virtual base Classes? | [7M] |
| | b) What are virtual functions? Describe the rules for declaring virtual functions. | [7M] |
| 9 | a) Explain different ways of initializing a vector with programming examples. | [7M] |
| | b) Write a C++ program to insert elements into a map. | [7M] |
| | Or | |
| 10 | a) Write a function template for finding the minimum value in an array. | [7M] |
| | b) Write a C++ program to insert elements into a list. | [7M] |

