

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)
B. Tech. Sem - II IT :SUMMER- 2022
SUBJECT : OBJECT ORIENTED PROGRAMMING

Day : Wednesday
Date : 3/8/2022

S-24114-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Use of non-programmable calculator is **allowed**.
 - 4) Assume suitable data **WHEREVER** necessary.
 - 5) Draw neat diagram **WHEREVER** necessary.
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Q.1 Briefly explain Object Oriented Programming (OOP) paradigm? List out the benefits of OOP. (10)

OR

Q.1 What are the types of type conversion in C++? How do you type convert an object into another object in C++? (10)

Q.2 What is class and object? Write syntax of class and object. Write program to accept and display bank account information using class and object. (10)

OR

Q.2 What is a Copy Constructor? Implement C++ program to add two complex numbers using constructor overloading. (10)

Q.3 What is operator overloading? What is the need for overloading an operator? Overload the numerical operators + and / for complex numbers "addition and division" respectively. (10)

OR

Q.3 Define class string. Write a code to compare two strings using overloaded == operator. (10)

Q.4 Infer concept of inheritance using base class, derived class and derived class constructor with proper example. (10)

OR

Q.4 How is memory allocated and deallocated in C++? Write a C++ program to find sum of array elements using dynamic memory allocation. (10)

Q.5 Summarize with examples a) Virtual Function b) Friend Function c) Static Function. (10)

OR

Q.5 Illustrate overloading the extraction and insertion operators in case of streams and files. (10)

Q.6 What is difference between class template and function template in C++? Implement a C++ program to demonstrate the addition of multiple types of data using generic function or template. (10)

OR

Q.6 Write a program of your choice using OOPs concept showing use of different containers. (10)
