

**BHARATI VIDYAPEETH INSTITUTE OF  
TECHNOLOGY, NAVI MUMBAI**

**Question Bank (K – Scheme)**

**Unit Test-I**

**Program: - CM/IF3K**

**Semester: - III**

**Course and Code: - Object Oriented Programming (313304)**

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**Chapter No 1: Principles of Object Oriented Programming**

**(2 Marks)**

- 1) State any two features of Object Oriented Programming. (CO1)
- 2) Define Class and Object. (CO1)
- 3) Write any four applications of OOP. (CO1)
- 4) Explain the input operator in C++ .(CO1)
- 5) Demonstrate the static and dynamic initialization of variables.(CO1)

**(4 Marks)**

- 6) Describe concept of type casting using suitable example.(CO1)
- 7) Write a program to print first n natural numbers and their sum using for loop.(CO1)
- 8) Write a C++ program to find the area of rectangle using class rectangle which has following details: i) Accept length and breadth from user. ii)Calculate the area iii)Display the result.(CO1)
- 9) With suitable example describe structure of C++ program.(CO1)
- 10) Develop a program to declare a class student the data members are rollno,name and marks .Accept and display data for one object of class student.(CO1)

## **Chapter No 2: Functions and Constructors**

**(2 Marks)**

- 1) Define Constructor. List types of Constructors. (CO2)
- 2) Write any two characteristics of friend functions.(CO2)
- 3) State the characteristics of static member function.(CO2)
- 4) Define Destrutor.Write its syntax.(CO2)

**(4 Marks)**

- 5) Write a C++ program to declare a class student with data members as rollno,and name.  
Declare a constructor to initialize data members of class. Display the data.(CO2)
- 6) Describe constructor with default arguments with an example.(CO2)
- 7) Write a program to show object as function argument.(CO2)
- 8) State the difference between constructor and destructor(any four points).(CO2)
- 9) Write a program to declare a class measure having data members add1,add2,add3.Initialize the data members using constructor and store their addition in third data member using function and display the addition.(CO2)
- 10) Develop a C++ program to create structure book with data members name,cost and author.Accept and display and for 5 books using structure.(CO2)

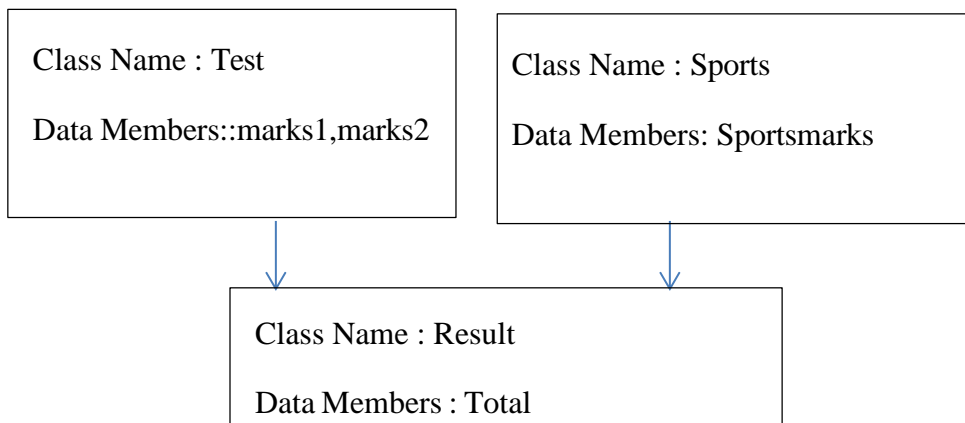
## Chapter no 3: Extending Classes using Inheritance

(2 Marks)

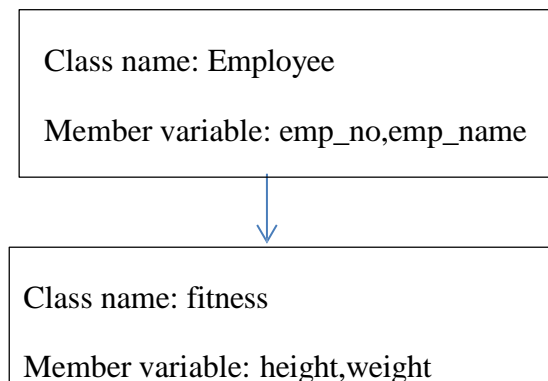
- 1) State different types of visibility modes in inheritance.(CO3)
- 2) Define inheritance. List different types of inheritance.(CO3)

(4 Marks)

- 3) Write a C++ program to implement multiple inheritance as shown in following figure. Accept and display data of test marks and sport's marks using object of class 'result'.(CO3)



- 4) Write a program to implement inheritance as shown in Fig. 1. Assume suitable member function. (CO3)



- 5) Write a program to implement inheritance as shown in Fig.2 Assume suitable member function . (CO3)

