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)

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) State the use of Memory Management Operator and explain it with example. (CO1)
4) Write any four applications of OOP. (CO1)
5) Explain the input operator in C++ .(CO1)
6) Differentiate between C and C++. (Any two points)(CO1).
7) Demonstrate the static and dynamic initialization of variables.(CO1)
8) Describe use of scope resolution operator with example.(CO1)

(4 Marks)

9) Describe concept of type casting using suitable example.(CO1)
10) Develop a C++ program to print Fibonacci series.(CO1)
11) Write a program to print first n natural numbers and their sum using for loop.(CO1)
12) Explain the access specifiers in C++.(CO1)
13) 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)
14) With suitable example describe structure of C++ program.(CO1)
15) Develop a program to find factorial of a given number using for loop.(CO1)
16) 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) State the characteristics of static data member.(CO2)
5) Explain inline member function.(CO2)
6) Define Destrutor.Write its syntax.(CO2)

(4 Marks)

7) 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)
8) Describe constructor with default arguments with an example.(CO2)
9) Write C++ program to count number of objects created with the help of static data member.(CO2)
10) Write a C++ program to declare two classes with data members as m1 and m2 respectively. Use friend function to calculate average of two(m1,m2) marks and display it.(CO2)
11) Compare static and non-static data members(CO2)
12) Write a program to show object as function argument.(CO2)
13) State the difference between constructor and destructor(any four points).(CO2)
14) 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)
15) 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)
16) Develop a C++ program using parameterized constructor.(CO2)

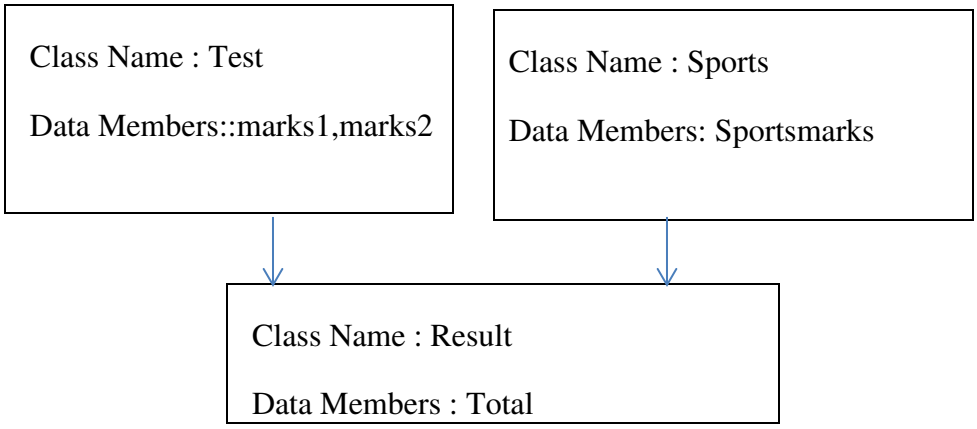
Chapter no 3: Extending Classes using Inheritance

(2 Marks)

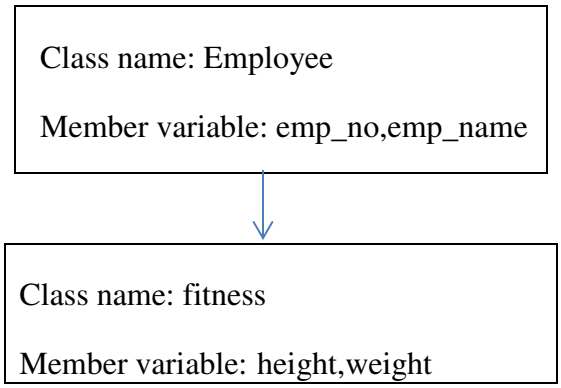
1) State different types of visibility modes in inheritance.(CO3)
2) Define inheritance. List different types of inheritance.(CO3)

(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)