C.U.SHAH UNIVERSITY
Winter Examination-2018

Subject Name : Object Oriented Programming

Subject Code : 4TE02OOP1   **Branch: B.Tech (All)**

Semester : 2   **Date : 31/10/2018**   **Time : 02:30 To 05:30**   **Marks : 70**

Instructions:
  (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  (2) Instructions written on main answer book are strictly to be obeyed.
  (3) Draw neat diagrams and figures (if necessary) at right places.
  (4) Assume suitable data if needed.

Q-1   **Attempt the following questions:**   **(14)**

  a) What is object orientation?
  b) Define Encapsulation.
  c) Define Polymorphism.
  d) Define abstract class.
  e) Explain setwidth().
  f) Explain <math.h>.
  g) What is cout?
       a) It is a Function   b) It is an operator c) It is an object d) It is a class
  h) The member of a class by default are
       a) private   b) public   c) protected   d) mandatory to specify
  i) Symbol of Scope resolution operator.
       a) +   b) ::   c) -   d) #
  j) Which of the following of the class allow only one object of it to be created?
       a) Virtual class   b) Abstract class c) Friend class d) Singleton class
  k) Which of the following is selection statement in C++?
       a) for   b) switch   c) break   d) exit
  l) What is the correct value to return to the operating system upon the successful completion of a program?
       a) 0   b) 1   c) -1   d) none
  m) Member function, when defined with the class specification
       a) Are not inline   b) are always inline c) are not always inline by default
          d) none of the above
  n) The function that calls itself for its processing is known as
       a) Inline function   b) friend function c) overloaded function

       d) recurcive function

Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**   **(14)**
  (a)   Explain basic structure of c++ program with suitable example.   **07**

(b)		Differentiate object oriented programming and procedural programming and Explain features of object oriented programming.	**07**

Q-3		**Attempt all questions**	**(14)**
	(a)	What is user defined function? Explain with c++ program to swap two numbers using call by reference.	**07**
	(b)	What is operator overloading? Explain unary minus (-) operator overloading with example.	**07**

Q-4		**Attempt all questions**	**(14)**
	(a)	What is class? Explain access modifier of c++.	**07**
	(b)	Explain this pointer with suitable example.	**07**

Q-5		**Attempt all questions**	**(14)**
	(a)	Explain friend function with example.	**07**
	(b)	Explain exception handling in C++ with example.	**07**

Q-6		**Attempt all questions**	**(14)**
	(a)	List types of inheritance. Explain multilevel inheritance with example.	**07**
	(b)	What is pure virtual function? Explain virtual function with example.	**07**
Q-7		**Attempt all questions**	**(14)**
	(a)	Explain function overloading with suitable example.	**07**
	(b)	Explain class template and function template with suitable example.	**07**

Q-8		**Attempt all questions**	**(14)**
	(a)	Explain File stream classes in C++.	**07**
	(b)	Explain copy constructor with suitable example.	**07**