PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA / IMCA Winter 2019 – 20 Examination

Semester: 3   Date: 07/12/2019
Subject Code: 05101203/05301203   Time: 2:00 PM to 4:30 PM
Subject Name: Object Oriented Concepts and Programming   Total Marks: 60

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1   Answer the followings.

A. Write short notes.   **(05)**

1. A constructor that accepts _____ parameters is called the default constructor.
2. A function with the same name as the class, but preceded with a tilde character (~) is called _____ of that class.
3. In unary operator overloading, it takes _____arguments.
4. _____ is runtime polymorphism.
5. The operator ">>" is called_____.

B. Multiple choice type questions.(Each of 01 marks)   **(10)**

1. Objects communicate with one another by using ----------.
   a)message passing   b)operator overloading
   c)inheritance   d) Both a & b

2. What are the basic run time entities in an object oriented program?
   a) Object   b) Data

   c) Function   d) None of These

3. OOPs follows ------------------- approach during program design.
   a) top down   b)bottom -up
   c)both a & b   d)none of these

4. ----- are the reserved words of the programming language.

   a) Tokens   b)Literals

   c) Separators   d) Keywords

5. Which of the following can be overloaded?
   a)Object   b)Functions

   c) Operators   c) Both B and C

6. What is the Output of this code?

   b = 3; a = b++;

   a) a contains 3 and b contains 4
   b) a contains 4 and b contains 4
   c) a contains 4 and b contains 3
   d) a contains 3 and b contains 3

7. The visibility of variables inside a structure is
   a) Private
   b) Public
   c) Protected
   d) None of these

8. _____ statement is used to print a blank line in CPP program

   a) "\n"
   b) endl
   c) Both 'a' and 'b'
   d) None of these

9. int d=int (a) + int (b);This statement is an example of -------

a) Implicit conversion
b) Explicit conversion
c) Internal conversion
d) External conversion

10. Arguments of a functions are separated with

a) comma (,)
b) semicolon (;)
c) colon (:)
d) None of these

Q.2 **Answer the followings. (Attempt Any Five.)** **(15)**
  1. Find the cube of number using "INLINE" function.
  2. What is function overloading? Explain with example.
  3. Illustrate controlling & looping statements.
  4. Explain "call by Reference" by swapping of two numbers.
  5. Give the example of multiple constructors in a class

  6. List out the operators which can't be overloaded.

Q.3 **Answer the following. (Attempt Any three)** **(15)**
  1. Differentiate Procedure oriented programming and Object oriented programming.
  2. What is Inheritance? Explain different types of Inheritance.
  3. What is a stream? How do the I/O facilities in C++ differ form that in C?
  4. Explain the friend function with rules and example.

Q.4 **Answer the following.**
  A. Explain the basic characteristics of object oriented programming **(05)**
  B. 1. What is Constructor? Describe the types of Constructor each with an Example. **(05)**
  2. What is Pointer? Write an example of Pointers to derived class. **(05)**
  OR
  B. 1. Explain Unary and Binary Operator overloading with example. **(05)**
  2. Explain different access specifier with example in C++. **(05)**