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RAN-1911000103050001**S. Y. BCA (Semester - III) Examination****January - 2021****305 - Object Oriented Programming****Time: 3 Hours]****[Total Marks: 70****સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

☛ **S. Y. BCA (Semester - III)**

Name of the Subject :

☛ **305 - Object Oriented Programming**Subject Code No.: **1911000103050001**

Seat No.:

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Student's Signature

- (2) All questions are compulsory.
 (3) Figures to the right indicate full marks.
 (4) Provide proper example as and when required.

Q.1 Select the most suitable Answer from the following Multiple Choice Questions: [10]

- What type of Operator Overloading can be implemented?
 - Unary
 - Binary
 - Ternary
 - Both a & b
- Which of the following keyword is used to overload an operator?
 - Overload
 - Operator
 - Friend
 - Virtual
- Which of the following is a type of conversion?
 - Basic to Class
 - Class to Basic
 - Class to Class
 - All of the Above

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- 4 Which of the following access specifier is used as default in a class definition?
 - a) Private
 - b) Public
 - c) Protected
 - d) Static
- 5 In C++ code, variables can be passed to a function by _____.
 - a) Call by Value
 - b) Call by Reference
 - c) Call by Address
 - d) All of the Above
- 6 Which of the following is not a type of Inheritance?
 - a) Multiple
 - b) Multi-Level
 - c) Interface
 - d) Hybrid
- 7 What is true about Destructor?
 - a) No need to write calling statement.
 - b) It is automatically called before program terminates.
 - c) Both a & b
 - d) None of the Above
- 8 If NO constructor is defined in the class, then compiler calls _____.
 - a) Default Constructor
 - b) Copy Constructor
 - c) Dynamic Constructor
 - d) Multiple Constructor
- 9 Which function in C++ is defined to do nothing?
 - a) Inline Function
 - b) Virtual Function
 - c) Pure Virtual Function
 - d) Friend Function
- 10 An object of which class is not created?
 - a) Virtual Base Class
 - b) Base Class
 - c) Abstract Class
 - d) Derive Class

Q.2 Do as directed:

[15]

- (A) What is Type Conversion? Explain class to class conversion 8
- (B) What is Constructor? Explain all types of constructor. 7

OR

- (A) Explain Virtual Base Class. 8
- (B) What is Operator Overloading? Write rules for operator overloading. Also, provide proper example. 7

Q.3 Answer the following: [15]

- (A) What is Polymorphism? Explain different types of polymorphism in brief. 8
- (B) Explain visibility modifier with example. 7

OR

- (A) Explain data abstraction and Encapsulation. 8
- (B) Explain Hybrid Inheritance and how we can remove the ambiguity occurred while implementing hybrid inheritance. 7

Q.4 Answer the following (Any 2): [15]

- (A) What is Exception Handling? Explain try with multiple catch with example.
- (B) Solve the following operators with manipulator:
- (i) 15 column width
 - (ii) 2 digit precision
 - (iii) Right alignment
 - (iv) Filling unused spaces with ‘*’
 - (v) Display Trailing Zero
- (C) Explain the benefits of object oriented programming.

Q.5 Do as directed (Any 2): [15]

- (A) Explain Static Data Member and Static Function.
- (B) Create an abstract class “Shape” which stores data members like length, breadth and radius. Create two classes “Circle” and “Rectangle” which stores data members like area respectively. Write a function to calculate area and display it.
- (C) Compare structure and class.
