EN-3734

Second Year B. C. A. (Sem. III) Examination

October / November - 2016

305 : Object Oriented Programming

Time : 3 Hours] [Total Marks : 70

Instructions :

(1)

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

Name of the Examination :
☛ SECOND YEAR B. C. A. (SEM. 3)

Name of the Subject :
☛ 305 : OBJECT ORIENTED PROGRAMMING

☛ Subject Code No. : 3 7 3 4 ☛ Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

(2) All questions are **compulsory**.

(3) Figures to the **right** indicate full marks.

1 Answer any **ten** : 10

(1) What is dynamic binding ?

(2) What is an abstract class ?

(3) What is reference variable ?

(4) The two major component of object are _____ and _____.

(5) List out the operators that cannot be overloaded.

(6) What is the difference between private and protected visibility modes ?

(7) What is stream ?

(8) State the difference between ios::app and ios::ate mode.

(9) Explain the limitation of inline function.

(10) What is difference betwen 'delete a' and 'delete [ ]a' ?

(11) State difference between *showpos* and *showpoint*.

2 Do as directed : **15**

(a) Explain different visibility modes with example. **7.5**

(b) List out basic concepts of OOP. Explain any two in brief. **7.5**

OR

2 (a) List memory management operators. Point out reasons why using new is better idea than using malloc( ) ? **7.5**

(b) Explain Array of objects with example. **7.5**

3 Do as directed : **15**

(a) What is conversion function ? Explain with example.

(b) Define constructor. Explain parametrized constructor with example.

OR

3 (a) In which circumstances function can be made as friend ? Write the advantage of friend function. Demonstrate one example of friend function. **7.5**

(b) What is inheritance ? Explain multilevel inheritance with example. **7.5**

4 Attempt **any two** : **15**

(a) Differentiate between unary and binary operator overloading.

(b) Explain different file opening modes.

(c) Define run time errors. Explain run time error in detail.

(d) How runtime polymorphism is achieved in C++ ? Explain with example.

5 Attempt any **two** : 15

(a) Create a class with at least two data members. Write a program in C++ to overload >> and << operator.

(b) Write a C++ program to consider Rollno, Name and Marks in C++ as data members. Take suitable member functions which provide functionality of input and display data. Class should capable to keep information for 5 students.

(c) Design single manipulators to provide the following output specification for printing float value :

(1) 10 column width

(2) 3 digit precision

(3) Left justified

(4) Filling unused space with '#'

(5) Display the trailing zeros

(6) Display sign of number.
