



RAN-3540

SYBCA 3rd SEMESTER Examination

March / April - 2019

Object Oriented Programming

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:

SYBCA 3rd SEMESTER

Name of the Subject :

Object Oriented Programming

Subject Code No.:

3

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Seat No.:

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Student's Signature

(2) All questions are compulsory.

(3) Figures to the right indicate full marks.

Q-1 Answer any Ten

[10]

1. Explain `tellg()` with an example.
2. Difference between binary and text files.
3. List out the operators that are not overloaded by friend function.
4. Explain scope resolution operator.
5. Explain data hiding concept in classes.
6. What is the meaning of "IS-A" and "HAS-A" relationship?
7. Which constructor is called while assigning some object with another?
8. Constructor can't have a return type. True/False
9. Difference between private and protected specifies.
10. Define class and object.
11. Explain `seekg()` with an example

Q-2 Do as directed [15]

- (A) List out features of object oriented programming. Explain polymorphism and encapsulation with an example. (8)
- (B) Explain class type to basic type conversion with an example. (7)

OR

- (A) How to remove ambiguity occurred in the case of hybrid inheritance? (8)
- (B) Explain memory management operator. Discuss advantages of new over malloc. (7)

Q-3 Do as directed [15]

- (A) What is friend function? Why we need to write friend function? Explain with example. Discuss its advantages. (8)
- (B) What is destructor? How it is written in C++? When it is called? Differentiate between constructor and destructor with proper example. (7)

OR

- (A) Explain virtual base class. How it is differ from virtual function. Explain with proper example. (8)
- (B) Explain default argument and function prototyping with an example (7)

Q-4 Do as directed [15]

- (A) What do you mean by containership? Differentiate between containership and inheritance with an proper example. (8)
- (B) What is operator overloading? Write any seven rules for operator overloading. Explain unary operator overloading with an example. (7)

OR

- (A) What is constructor? Explain parameterized constructor with an example. (8)
- (B) Explain read() and write() operation in file with an example and also list out various file modes. (7)

Q-5 Answer the following (Any two)

[15]

- (A) What do you mean by exception handling? Explain Exception Handling Mechanism with example.
- (B) Write a program to create a class student stores the roll_no, class test stores the mark obtained in two subjects and class result contains the total marks obtained the test. The class result can inherit the details of the marks obtained in the test and the roll_no of student class.
- (C) Write a program for creating a class figure & calculate the area of the circle ($\pi * r * r$) with the help of constructor. Get the details from the user & display it.
- (D) Explain the following manipulators with example.
(a) endl (b) setw (c) setprecision (d) setfill (e) setiosflag
