



RAN-0845

S.Y. B.Sc. (Semester-3) Examination

March / April - 2019

COMPUTER SCIENCE Paper : III

(301): Object Oriented Programming :C++ (OLD & NEW)

[Total Marks: 50

सूचना : / Instructions

नीचे दृशविले निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.
Fill up strictly the details of signs on your answer book

Name of the Examination:

S.Y. B.Sc. (Semester-3)

Name of the Subject :

COMPUTER SCIENCE Paper : III

Subject Code No.: 0 8 4 5

Seat No.:

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Student's Signature

Q1 Answer the Following

[10]

1. List the four features of OOPS.
2. Explain the use of dynamic operators.
3. What is the purpose of nested class ?
4. Explain the use of inline functions.
5. Explain the importance of 'this' pointer.

Q2[A] Differentiate between class and structure. With an example explain the syntax for defining a class

[07]

OR

Q2[A] Differentiate between procedural programming language and Object Oriented Programming language.

[07]

Q2[B] Explain multilevel inheritance with proper example. **[08]**

OR

Q2[B] When is friend function used? Explain with proper example. **[08]**

Q3[A] Explain the characteristics of constructor. Explain parameterized constructor with proper example. **[07]**

OR

Q3[A] Explain the visibility of base class members for the access specifiers: private, protected and public while creating the derived class and also explain the syntax for creating derived class. **[07]**

Q3[B] What is the purpose of static data member? Explain static function with proper example. **[08]**

OR

Q3[B] Explain passing of parameters in the base class constructor in multiple inheritance. **[08]**

Q4 Write a C++ program to create a class called STRING and Implement the following operations. Display the result after every operation by overloading the operator ‘-’. **[10]**

i) STRING S1= ‘SYCS’

ii) STRING S2 = ‘CS’

iii) STRING S3 = S1-S2

O/p : SY

OR

Q4 Write a C++ program to create base class “Student” with data members (Name, rollno, Marks of 3 subjects, total marks) and function get() (to take input from the user) , Create a derived class “Result” with function calculate which calculates the percentage of the student and display the Grade as PASS with percentage > 50 and Grade as FAIL with percentage <50. Display result for 3 students. **[10]**