

**QP CODE: S501AN06**

**Time: 3 Hours**

Max Marks: **80** (Q1: 25 marks, Q2: 35 marks, Record: 10 marks, Viva: 10 Marks)

**FIFTH SEMESTER BCA PROGRAMME (CBCS)**

**PRACTICAL EXAMINATION NOVEMBER 2024**

**Software Lab V**

1. Write an applet program to draw a Kite.
2. Create an abstract class called **Figure** which contains three data members: length, breadth, and height. Include an abstract method to find the **area**. **Figure** class also contains concrete methods to read the data members and to display them. Derive two classes **Rectangle** and **Triangle** from **Figure** and override **area()** to find the area of a rectangle and triangle.

**QP CODE: S501AN07**

**Time: 3 Hours**

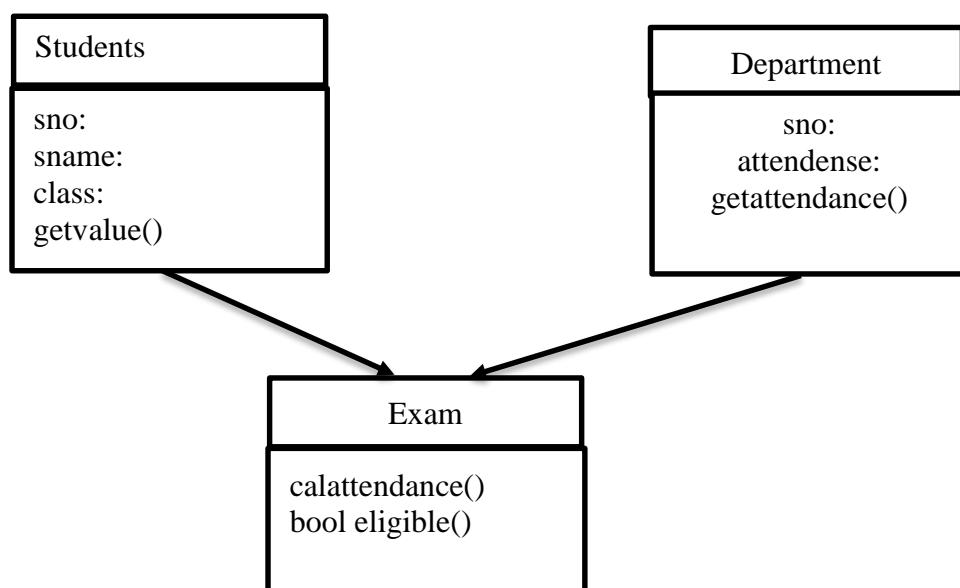
Max Marks: **80** (Q1: 25 marks, Q2: 35 marks, Record: 10 marks, Viva: 10 Marks)

**FIFTH SEMESTER BCA PROGRAMME (CBCS)**

**PRACTICAL EXAMINATION NOVEMBER 2024**

**Software Lab V**

1. Write a swing program to accept an integer in a textbox then find the cube of that number and display the result in the second textbox.
2. Write a Java program to find the details of the students eligible to enroll for the examination (Students and Department jointly give the eligibility criteria for the enrollment class) using interfaces.



**QP CODE: S501AN08**

**Time: 3 Hours**

Max Marks: **80** (Q1: 25 marks, Q2: 35 marks, Record: 10 marks, Viva: 10 Marks)

**FIFTH SEMESTER BCA PROGRAMME (CBCS)**

**PRACTICAL EXAMINATION NOVEMBER 2024**

**Software Lab V**

1. Write an applet program to display a star.
  
2. Define class MyDate with members: day, month, and year. Define default and parameterized constructors. Accept values from the command line and create a date object. Throw user-defined exceptions – “InvalidDayException” or “InvalidMonthException” if the day and month are invalid. If the date is valid, display the message “Valid date”.

**QP CODE: S501AN09**

**Time: 3 Hours**

Max Marks: **80** (Q1: 25 marks, Q2: 35 marks, Record: 10 marks, Viva: 10 Marks)

**FIFTH SEMESTER BCA PROGRAMME (CBCS)**

**PRACTICAL EXAMINATION NOVEMBER 2024**

**Software Lab V**

1. Write a program using Swing to accept values in two textboxes then find the smallest number and display the result in the third text box.
  
2. Create a package named **music** and define a class **Song** inside it. The Song class should have instance variables title, artist, and duration, and methods **play()** to play the song, and **displayDetails()** to display the song's details. Create another class Music in a different package and use the Song class to play a song and display its details.

**QP CODE: S501AN10**

**Time: 3 Hours**

Max Marks: **80** (Q1: 25 marks, Q2: 35 marks, Record: 10 marks, Viva: 10 Marks)

**FIFTH SEMESTER BCA PROGRAMME (CBCS)**

**PRACTICAL EXAMINATION NOVEMBER 2024**

**Software Lab V**

1. Write a swing program to accept a value in a textbox then find the area of a circle and display the result in the second textbox. (hint :  $A = \pi r^2$  )
  
2. Create an interface “CreditCardInterface” with methods to viewCreditAmount, viewPin, changePin, useCard, and payBalance. Create a class Customer (name, card number, pin, creditAmount – initialized to 0). Implement methods viewCreditAmount, viewPin, changePin, and payBalance of the interface. From Customer, create classes RegularCardHolder (maxCreditLimit) and GoldCardHolder (String specialPrivileges) and define the remaining methods of the interface.