C. No. COM-404

Comp. Engineering   Java Programming
                      (New Course)

Time allowed : 3 hrs.   Maximum Marks: 100

Note :- Attempt any five questions selecting atleast two from each section.

SECTION – A

Q1 (a) What is polymorphism? Write a program to illustrate the concept of Dynamic   (10)
        polymorphism in java.(

(b) What is an abstract class? Explain the use of abstract class with an example.   (5)

(c) Differentiate between overloading and overriding with the help of suitable   (5)
        example.

Q2 (a) Explain advantage of exception? How can we handle an Exception? Create   (10)
        your own exception named "MyException " which takes an string as input and
        throws a message "string too large" when the size of string is more than ten
        characters.

(b) Write a program in Java for creating thread by inheriting the thread class.   (10)

Q3   Distinguish between the following with example: (20)
        1. Exception and Error
        2. Method overloading and overriding
        3. Final and Finally
        4. Instance variables and class variables.

Q4 (a) What is checked exception? How is it different from unchecked exception?   (10)
        Explain with an example?

(b) What are the uses of "this" keyword in Java? Explain with the help of an   (10)
        example.

SECTION – B

Q5 (a) What is an Adapter Class? Write a program in java to create a frame window   (10)
        that responds to mouse clicks and keystrokes?

(b) What do you mean by an event? Explain different components of an event.   (10)

Q6 (a) Write a java Applet to present a pull down list of seven colors (Red, Orange,   (10)
        Yellow, Green, Blue, Indigo and Green) of rainbow .Allow the user to select
        one of the colors to change the background of applet?

(b) What is an event in GUI programming? Explain different components of an   (10)
        event

Q7 (a) What are the different types of AWT components? How are these components   (10)
        added to the container?

(b) Write an applet that draws circle, a line, and 5 a polygon inside the applet's   (10)
        visible area.

Q8 (a) What are the principles of Event Delegation model? What are the sources of   (10)
        events and event listener interface?

(b) What is listener? Write a program to implement mouse motion listener.   (10)