VCD S.Y.B.S.C (C.S.) –Computer II –SEM-IV - 2014-15 – 75 -2½HRS
08/05/2015

Q.1 Attempt any Four. [20]

a) Write a short note on nested and inner classes in Java.

b) What do you mean by constructor? Also explain parameterized constructor with suitable example.

c) Why finalize() method is used in Java?

d) What are arrays? Explain one dimensional arrays in Java.

e) Explain all features of Java.

f) Admission in professional course is subject to the following conditions:

   i) Marks in Mathematics   >=60
   ii) Marks in Physics   >=50
   iii) Marks in Chemistry   >=40
   v) Total in all three subjects   >=200

                            OR

   Total in Mathematics and Physics   >=150

Given the marks of three subjects, write a program to process the applications of eligible candidates.

g) What do you mean by method overloading? Illustrate with example.

h) Differentiate between Java with C.

Q.2 Attempt any Four. [20]

a) What are input and output stream? List two methods of each class.

b) How interfaces can be used to support multiple inheritance? Develop a standalone java program to achieve the same.

c) Create a try block that is likely to generate three types of exception and then incorporate necessary catch blocks to catch and handle them appropriately.

d) What is an exception? Explain exception handling mechanism in java.

e) What is inheritance? What are its different forms? Develop a java program to achieve single inheritance.

f) What are the major differences between an interfaces and classes?

g) Explain dynamic method dispatch.

h) Write a java program to find fibonacci of a given number. Number should be inputted by the user.

                                                           [20]

Q.3 Attempt any Four.

a) Differentiate an applet with an application.

b) Write a short note on Windows Fundamentals.

c) Explain following AWT controls :

   i) TextArea
   ii) CheckBox
   iii) TextField

d) Explain following methods of Graphics class:
    i) drawRoundRect()
    ii) setColor()
    iii) setFont()
    iv) fillArc()
    v) drawOval()

e) Write a short note on BorderLayout and GridLayout.

f) Explain following Event Claseses :
    i) KeyEvent
    ii) MouseEvent

g) Write a short note on Delegation Event Model.

h) Write a program using an applet to draw following:
    i) Rectangle
    ii) Square inside a circle.

Q. 4 Attempt any three.   **[15]**

a) Compare in terms of their functions, the following pair of statements.
    i) while and do...while
    ii) break and continue

b) Explain all types of visibility controls used in Java.

c) Write a short note on abstract methods and abstract classes.

d) What is a package? How do we design a package?

e) Explain applet life cycle.

f) Write an applet code to display a message "I am a Student" when a Key is pressed.

SYCS
CII (40)