Code No: RR210502 **Set No.1**

II B.Tech. I Semester Regular Examinations, November -2005
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain briefly the main concepts of object-oriented programming.
   (b) What are constructor and destructor functions? Explain different types of constructors? [8+8]
2. (a) Write short notes on the following.
      i. Data abstraction
      ii. Data binding
      iii. Garbage collection
      iv. Virtual destructor.
   (b) Discuss about the package of Java language. [8+8]
3. (a) Write a Java program that uses the length() and capacity() methods of the StringBuffer class. Give the output.
   (b) Explain the charAt() and setCharAt() methods of the StringBuffer class. [8+8]
4. (a) Write a program that draws a series of eight concentric circles.The circles should be separated by 10 pixels.
   (b) Write a program that randomly draws characters in different font sizes and colors. [8+8]
5. Write short notes on the following:
   (a) multithreading
   (b) exception handling [8+8]
6. Write a program to find out the number of words in a given file. [16]
7. Write a program to handle HTTP get request? [16]
8. How can you read a file on a web server? Write a program to illustrate the concept. [16]

⋆ ⋆ ⋆ ⋆ ⋆

II B.Tech. I Semester Regular Examinations, November -2005
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Write a program segment that accomplishes each of the following.
   (a) Calculate the integer part of Quotient when integer a is divided by integer b.
   (b) Calculate integer remainder when integer a is divided by integer b.
   (c) Use the program pieces developed in a) and b) to write a method displayDigit that receives an integer between 1 and 99999 and prints it as a series of digits, separated by one space and two successive integers by two spaces. For example, integers 4562 and 4563 should be printed as 4 5 6 2 5 6 2. [6+5+5]
2. (a) What is multiple inheritance? Explain how does Java support multiple inheritance?
   (b) Write about the data types supported by Java? [8+8]
3. (a) Write a Java program to illustrate the usage of the delete() and deleteAt() methods of the StringBuffer class. Give output.
   (b) Explain any four methods of the StringBuffer class. [8+8]
4. (a) What is an event driven programming and how is it structured?
   (b) How events are categorized in Java?
   (c) What is an adapter class and how can adapter classes are effective? [5+5+6]
5. (a) What do you mean by an exception and error? Give the hierarchy of the exceptions in java.
   (b) List out the various java built in exception handlers. [8+8]
6. Discuss how I/O operations are performed in java with suitable examples. [16]
7. (a) Write about javax.servlet package?
   (b) Write about java.sql package? [8+8]
8. How can you read a file on a web server? Write a program to illustrate the concept. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: RR210502 **Set No.3**

II B.Tech. I Semester Regular Examinations, November -2005
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) What are the drawbacks of structured procedural languages? Explain how Java solved these problems.
   (b) How is portability achieved in Java?
   (c) Write any five applications of OOP technology. [5+5+6]
2. (a) Contrast: inner class Vs. nested class.
   (b) Write a Java program to illustrate the usage of inner class.
   (c) What is the purpose of inheritance? Give the general form to declare abstract methods. Should a class that contains one or more abstract methods be declared abstract? Can the subclass of an abstract class be abstract itself? Justify. [6+5+5]
3. (a) Define the variable super and its uses with an example.
   (b) Write a program to illustrate the multiple inheritance.
   (c) Write about abstract class and early binding. [5+6+5]
4. Write a program that draws lines of random lengths in random colors. [16]
5. (a) Discuss about the nested try statement and how such a program may be executed?
   (b) List out by an example the way to create a user defined exception. [8+8]
6. Write a program that uses a SequenceInputStream to output the contents of two files. [16]
7. Discuss java servlet architecture? [16]
8. (a) What is Inetaddress? How to create an Inetaddress?
   (b) Discuss briefly about the following:
      i. TCP
      ii. UDP
      iii. URL. [8+8]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: RR210502 **Set No.4**

II B.Tech. I Semester Regular Examinations, November -2005
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Write a Java program for multiplying two matrices. [16]
2. (a) Explain the significance of public, protected and private access specifiers in inheritance?
   (b) Explain the peculiariaty of Java in providing multiple inheritance.
   (c) Write a Java program that uses overloaded constructors and this pseudovariable. [5+6+5]
3. What is runtime polymorphism. Write a program to illustrate the concept of runtime polymorphism in Java? [16]
4. (a) Explain the goals of Swing.
   (b) Explain the Swing architecture with a diagram. [8+8]
5. Explain with an example why exception handling is an effective means for dealing with constructor failure. [16]
6. Discuss about the FileInputstream and FileOutputStream in java with examples. [16]
7. Design a multi-tier application using JDBC from servlet. [16]
8. How to write a RMI program? Explain with the help of a program. [16]

⋆ ⋆ ⋆ ⋆ ⋆