Code No: 07A80206   **R07**   **Set No. 2**

IV B.Tech II Semester Examinations,April/May 2012
OBJECT ORIENTED PROGRAMMING
Electrical And Electronics Engineering

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. What is Inheritance? Discuss the differences in inheritances in C++ and java. [16]

2. (a) Describe the genesis of java. Also write brief overview of java

   (b) List and explain the control statements used in java. Also describe the syntax of the control statements with suitable illustration. [8+8]

3. (a) Give the class hierarchy of event classes in Java.

   (b) Explain in detail about ActionEvent and AdjustmentEvent classes. [4+12]

4. (a) What is the significance of main thread in multithreading. Explain with an example how you can control main thread.

   (b) What is the role of Sleep class in multithreading. Explain. [10+6]

5. Briefly explain the components of AWT. [16]

6. Define the terms client and server. Use socket programming to design a client/server application that takes the filename as input, checks whether the file exists and displays its contents if exists. Display appropriate message for each case. [4+12]

7. Write a program to create an interface containing a static inner class. Implement this interface and create an instance of the inner class. [16]

8. Write an application to solve quadratic equation of the form
   $AX^2 + BX + C = 0$

   Where the coefficients A,B and C are real numbers. The two real number solutions are derived by the formula
   $X = (-B \pm \sqrt{B^2 - 4AC})/2A$
   For this exercise,you may assume that $A \neq 0$ and the relationship
   $B^2 \geq 4AC$
   holds, so there will be real number solutions for x. Use the standard input and output.

   [16]

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Code No: 07A80206   **R07**   **Set No. 4**

IV B.Tech II Semester Examinations,April/May 2012
OBJECT ORIENTED PROGRAMMING
Electrical And Electronics Engineering

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. (a) When do we declare a method or class as final?

   (b) When do we declare a method or class as abstract?

   (c) Describe different levels of access protections available in java.   [4+4+8]

2. Explain in detail about the following event classes:

   (a) KeyEvent

   (b) ItemEvent.   [10+6]

3. (a) List at least ten major differences between C and Java

   (b) Compare in terms of their functions, the following pairs of statements:
      i. while and do.....while
      ii. while and for

   (c) What is an empty statement? Explain its usefulness.   [4+4+4+4]

4. Create an inheritance hierarchy of Rodent: Mouse, Gerbil, Hamster, etc. In the baseclass, provide methods that are common to all Rodents, and override these in the derived classes to perform different behaviors depending on the specific type of Rodent.Create an array of Rodent, fill it with different specific types of Rodents, and call your base-class methods.Explain what happens.   [16]

5. Explain how multithreading is supported in java using the thread class and the Runnable interface.   [16]

6. Explain with examples. What happens when the following are clicked or released?

   (a) JMenuItem

   (b) JCheckBoxMenuItem

   (c) JRadioButtonMenuItem.   [5+5+6]

7. Write a program to create an interface U with three methods. Create a class A with a method that produces a reference to a U by building an anonymous inner class. Create a second class B that contains an array of U. B should have one method that accepts and stores a reference to a U in the array, a second method that sets a reference in the array (specified by the method argument) to null and a third method that moves through the array and calls the methods in U. In main( ), create a group of A objects and a single B. Fill the B with U references produced by the A objects. Use the B to call back into all the A objects. Remove some of the U references from the B.   [16]

8. Explain connection less client/server interaction with datagrams in detail. Give suitable example. [16]

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Code No: 07A80206 | **R07** | **Set No. 1**

IV B.Tech II Semester Examinations,April/May 2012
OBJECT ORIENTED PROGRAMMING
Electrical And Electronics Engineering

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. (a) Define package? Explain about the access protection in packages.

   (b) Define an interface? Explain about the type of the variables defined in interfaces with examples.   [8+8]

2. (a) What is an array? Why arrays are easier to use compared to a bunch of related variables?

   (b) Write a program for transposition of a matrix using arraycopy command.
                                                                        [6+10]

3. (a) Explain how threads with different priorities execute in environment which supports priorities and which doesn't support priorities.

   (b) what are the functions available in java related to priority.   [10+6]

4. Explain in detail about the following event classes:

   (a) ComponentEvent

   (b) ContainerEvent

   (c) FocusEvent.   [6+5+5]

5. (a) Justify the following statement with an example. "A superclass variable can reference a subclass object".

   (b) Explain the main two uses of super.

   (c) Explain the procedure to call super class members with example.   [6+5+5]

6. Discuss various classes of java.util package.   [16]

7. Write a program that will compute the following series:

   (a) $1/1 + 1/2 + 1/3 + ... + 1/n$

   (b) $1/1 + 1/2 + 1/2^2 + ... + 1/2^n$.   [8+8]

8. Create a simple, non-editable combo box with a list of items. When selected one of the items, it will display the string to the console and also printing the string which is being deselected i.e. the string which already been selected.   [16]

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Code No: 07A80206   **R07**   **Set No. 3**

IV B.Tech II Semester Examinations,April/May 2012
OBJECT ORIENTED PROGRAMMING
Electrical And Electronics Engineering

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

Answer any FIVE Questions
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1. What is Multiple Inheritance? Explain how it cam be implemented in Java with the help of an example. [16]

2. Give the class hierarchy in java related to Graphics. Briefly explain each class. [16]

3. (a) Explain the steps involved in establishing an URL connection.

   (b) Write an applet to display the home page of an html file using URL class.

   [8+8]

4. (a) What is the difference between overriding and overloading a method?

   (b) Write an application that finds the smallest of several integers. Assume that the first value read specifies the number of values to input the user. [8+8]

5. (a) Explain throw statement in Java with the help of an example program.

   (b) Is the order of catch statements has any impact on the final output of the program. Explain. [10+6]

6. Distiguish between the following terms:

   (a) Objects and classes

   (b) Data abstraction and data encapsulation

   (c) Inheritance and polymorphism

   (d) Dynamic binding and message passing. [16]

7. Explain various text components in JFC with examples. [16]

8. Explain about Object class in detail. [16]

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