Code: CT21   Subject: OOPS USING JAVA

ALCCS – NEW SCHEME

Time: 3 Hours   FEBRUARY 2013   **Max. Marks: 100**

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE:
- **Question 1 is compulsory and carries 28 marks. Answer any FOUR questions from the rest. Marks are indicated against each question.**
- **Parts of a question should be answered at the same place.**

Q.1   a. What are Adapter classes?

   b. What is multithreading? What are the two different ways to create multithreaded program?

   c. What is the difference among final, finally and finalize?

   d. Discuss each part of the following statement:
   System.out.println();

   e. How does Java implement platform independence?

   f. What is the difference between an instance member and a class member?

   g. What is JAR? Write few options used with JAR.   **(7 × 4)**

Q.2   a. What is polymorphism? Differentiate between compile time and runtime polymorphism with the help of complete java program.   **(3+3+3)**

   b. What is the role of garbage collection?   **(3)**

   c. What are packages? Explain the steps to create packages.   **(6)**

Q.3   a. What is the difference between character based and byte based IO streams? Discuss different types of character and byte based streams.   **(3+6)**

   b. Write a program to input three integers through keyboard and print the largest among them?   **(9)**

Q.4   a. Write a program to create a window and set its title with "IETE" using AWT.   **(6)**

   b. What is inheritance? How will you call parameterized constructor and overrided method from parent class in sub class?   **(2+7)**

    c.   What are the advantages of Object Oriented Programming?   **(3)**

Q.5   a. What is Layout managers? Discuss different types of layout managers used in JAVA.
                                                             (2+7)

       b. What is Servlet? Create a Servlet program to print "Hello Java".   **(2+7)**

Q.6   a. What is synchronization? Write a program to demonstrate synchronization.   **(2+7)**

       b. What is event handling? Discuss different types of event handling classes and event handling interfaces.   **(3+3+3)**

Q.7   a. What are the differences between caught and uncaught exception? Write a program to create user defined exception.   **(3+6)**

       b. What are software components? What are the different types of java bean properties?
                                                               (2+7)