Code: CT21   **Subject: OOPS USING JAVA**

ALCCS – NEW SCHEME

Time: 3 Hours   **AUGUST 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. Explain the main features of OOPS.

   b. How do java programs maintain platform independency with the help of JVM?

   c. Explain the major differences between an array and a vector.

   d. What is the difference between sleep and suspend?

   e. Explain the life cycle of an Applet.

   f. Discuss the InetAddress class of java.net package and also its methods.

   g. What is HTTP Servlet? Explain all methods of HTTP Servlet class.   **(7 × 4)**

Q.2   a. Write a program using while loop to reverse the digits of a given number. For eg. The number 5894 should be written as 4985.   **(9)**

   b. Given are two one dimensional arrays A and B which are sorted in ascending order. Write a program to merge them into a single sorted array C that contains every item from arrays A and B, in ascending order.   **(9)**

Q.3   a. Explain the advantages of using interfaces in Java? How they are different from Abstract Classes.   **(9)**

   b. What is method overloading & Method overriding with suitable example? Can you overload operators in java?   **(9)**

Q.4   a. Discuss the various levels of access protection available for packages and their implications. What is static import?   **(9)**

   b. What is the difference between multiprocessing and multithreading? What is to be done to implement these in a program?   **(9)**

Q.5   a. What do you mean by exception? How are they handled in Java? Explain try-catch-finally block with an example.   **(9)**

b. Explain the access modifiers (private, public, protected and default) used in inheriting the classes in JAVA.   **(9)**

Q.6   a. What is a "finally" block? When and how is it used? Give a suitable example.   **(9)**

b. Write a Java program to copy one file to another file with the help of byte stream classes.   **(9)**

Q.7   a. Explain the drawPolygon() method of Polygon class with the help of an example. **(9)**

b. Explain three UI components of swing and their classes and constructors.   **(9)**