** CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING**

******Advanced Computing Training School (ACTS)**

**C-DAC ATC NETCOM JAIPUR**

**Diploma in Advanced Software Development Methodologies (DASDM)**

**Student Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Module Name: OOPS and Data Structure using Java**

**PRN No \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours**

**SET-A**

Attempt any four questions. Each Question is of equal marks.

1. Two strings, a and b, are called anagrams if they contain all the same characters in the same frequencies. For example, the anagrams of CAT are CAT, ACT, TAC, TCA, ATC and CTA.

Write the function in Java. If a and b are case-insensitive anagrams, print “Anagrams”; otherwise, print “Not Anagrams” instead.

1. Write a Java Program to print the second largest number from the 10 number in an array
2. Design a Stack in Java using Array to implement the following operations (do not use built-in functions) with proper Underflow and Overflow condition
3. Push Operation
4. Pop Operation
5. Peek Operation
6. Display Operation
7. Write a program which shows the User Defined Exceptions in Java. If the users age is below 18, then Print the message “You are not eligible to Vote” otherwise show the message “You are eligible for Vote”.
8. Write a program using Thread Synchronization
9. To print prime numbers from 1 to 100
10. To print Armstrong numbers from 1 to 5000