

Student Registration Number

B

## COURSE CODE: DCAP501

### COURSE TITLE: MODERN PROGRAMMING TOOLS & TECHNIQUES-I

Date: 26-Sep-2013

Time: 09:30-12:30

Time Allowed: 3 hours

Max. Marks: 80

1. This paper contains 10 questions divided in two parts on 1 page.
2. **Part A is compulsory.**
3. **In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the selected question.**
4. The marks assigned to each question are shown at the end of each question in square brackets.
5. Answer all questions in serial order.
6. **The student is required to attempt the question paper in English medium only.**

#### PART-A

- Q1. a) What is the difference between method and constructor? [2]  
b) Define 'class' and 'Abstract class'. [2]  
c) What is the difference between 'String' and 'StringBuffer' class? [2]  
d) What are the uses of 'throws' keyword? [2]  
e) What do you mean by 'Package'? [2]  
f) What are the different states of Thread life cycle? [2]  
g) Define 'Byte Stream' and 'Character Stream'. [2]  
h) Name any two layout managers in AWT package. [2]  
i) What is the difference between 'AWT' and 'Swing'? [2]  
j) Write all the methods of 'KeyListener' interface. [2]

#### PART-B

- Q2. Write five methods of each of 'String' and 'StringBuffer' class. [10]  
Q3. Explain while, do-while and for loops with example. [10]  
Q4. Write a program to create a thread which prints all the odd numbers from 21 to 1 in reverse order. [10]  
Q5. Write a program to create an Applet which contains nine Buttons in a square grid. [10]  
Q6. What do you mean by Event Listener? Name any five Listener interfaces. [10]  
Q7. What do you mean by Streams? Explain categorization of Stream classes. [10]  
Q8. Explain various keywords used in Exception Handling in Java? [10]  
Q9. a) What are the uses of 'super' keyword in Java? [5]  
b) Define Nested class. What are the two types of nested classes? [5]  
Q10. a) What do you mean by inheritance in Java? [5]  
b) Briefly describe the logical operators in Java. [5]