

Code No: 114CX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B.Tech II Year II Semester Examinations, October/November - 2016****JAVA PROGRAMMING****(Common to CSE, IT)****Time: 3 Hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

PART- A**(25 Marks)**

- 1.a) Define polymorphism. [2]
- b) Why is Java known as platform independent? [3]
- c) Differentiate between abstract class and interface. [2]
- d) How to create and access a package? [3]
- e) List the thread states. [2]
- f) What keywords are essential in handling user-defined exception? [3]
- g) What is the use of String Tokenizer class? [2]
- h) Write about the random access file operations. [3]
- i) What are the merits of swing components over AWT? [2]
- j) What is an adapter class? What is its significance? List the adapter classes. [3]

PART-B**(50 Marks)**

2. What are the drawbacks of procedural languages? Explain the need of object oriented programming with suitable program. [10]

OR

- 3.a) Does Java support multi way selection statement? Justify your answer.
- b) Describe type promotion rules of Java. [5+5]

- 4.a) Explain multilevel inheritance with the help of abstract class in your program.
- b) Can inheritance be applied between interfaces? Justify your answer. [5+5]

OR

- 5.a) What is meant by dynamic method dispatch? Explain with a program.
- b) Illustrate the use of static nested classes. [5+5]

6. What is an exception? How are exceptions handled in Java programming? Explain with suitable program. [10]

OR

7. Describe the need of thread synchronization. How is it achieved in Java programming? Explain with a suitable program. [10]

- 8.a) Differentiate between ArrayList and Vector.
b) List the methods of Stack class. [5+5]

OR

9. Write a JDBC program to search for an attribute in a table and display the entire tuple to the user. For example, display all the details of the student given his/her roll number. [10]

- 10.a) Is Applet more secure than application program? Justify your answer.
b) Design a user interface to collect data from the student for admission application using swing components. [5+5]

OR

11. Write a program to demonstrate various keyboard events with suitable functionality. [10]

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