

Code No: 114CX**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech II Year II Semester Examinations, May - 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) Differentiate between break and continue statement. [2]
- b) What is type casting? Explain with an example. [3]
- c) What is the use of super keyword? [2]
- d) Distinguish between abstract class and concrete class. [3]
- e) What are the advantages of multithreading? [2]
- f) Explain the types of exceptions. [3]
- g) List the hash table constructors. [2]
- h) Explain the methods defined by Vector. [3]
- i) Explain the use of layout managers. [2]
- j) Explain the life cycle of an applet. [3]

PART - B**(50 Marks)**

- 2.a) Write a java program to find the factorial of a given number.
- b) Explain the different types of constructors with an example. [5+5]

OR

- 3.a) Write a program to find the transpose of a given matrix.
- b) Explain the scope and life time of the variable. [5+5]

- 4.a) Explain the different parameter passing mechanisms used in Java with an example.
- b) Write a runtime polymorphism program in Java by using interface reference variable. [5+5]

OR

- 5.a) Design an interface called Shape with methods draw() and getArea(). Further design two classes called Circle and Rectangle that implements Shape to compute area of respective shapes. Use appropriate getter and setter methods. Write a java program for the same.

- b) Explain the various access specifiers are used in java. [5+5]

- 6.a) Write a program that demonstrate the priority setting in threads.
- b) Write a program that includes a try block and a catch clause which processes the arithmetic exception generated by division-by-zero error. [5+5]

OR

- 7.a) Write a program that creates a thread that forces preemptive scheduling for lower-priority threads.
- b) Explain the check and balance concept with an example. [5+5]

- 8.a) Explain the types of drivers used in JDBC.
b) Write a program to implement the operations of random access file. [5+5]
- OR**
- 9.a) Explain the file management using File class.
b) Write a program which stores a list of strings in an ArrayList and then displays the contents of the list. [5+5]
- 10.a) Describe about various components in AWT.
b) Write an applet program to handle all mouse events. [5+5]
- OR**
- 11.a) Write a Java program to create AWT radio buttons using check box group.
b) Explain the various event listener interfaces. [5+5]

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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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