

**Code No: 124CX****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech II Year II Semester Examinations, December - 2017****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 data abstraction. [2]
- b) What is the size of char data type? Why does it differ from C language? [3]
- c) What is the use of anonymous inner class? [2]
- d) What is a package? How to define it and access it? [3]
- e) Differentiate between error and exception. [2]
- f) How to assign priorities to threads? [3]
- g) List the functions of Stack class. [2]
- h) What is the need of JDBC type 3, type 4 drivers? [3]
- i) What are the sources for item event? [2]
- j) Give the hierarchy for swing components. [3]

**PART-B****(50 Marks)**

- 2.a) What feature of Java makes it platform independent and portable? [5+5]
  - b) Is Java a robust language? Justify your answer. [5+5]
- OR**
- 3.a) Differentiate between a class and object. [5+5]
  - b) Demonstrate constructor overloading concept. [5+5]
4. What is inheritance? Explain different forms of inheritance with suitable program segments and real world example classes. [10]
- OR**
- 5.a) Differentiate between interface and abstract class. [5+5]
  - b) What is meant by dynamic method dispatch? [5+5]
- 6.a) Write a program to illustrate the use of multiple catch blocks for a try block. [5+5]
  - b) What are the uses of 'throw' and 'throws' clauses for exception handling? [5+5]
- OR**
- 7.a) What is the difference between a thread and a process? [5+5]
  - b) How to achieve synchronization among threads? Write suitable code. [5+5]

- 8.a) What is a vector? How does it differ from array, list?  
b) Write a program to count number of words in a given sentence. [5+5]

**OR**

- 9.a) Write a program to copy the contents of file1 to file 2. Read the names of files as command line arguments.  
b) Write about driver manager class for database connectivity. [5+5]

- 10.a) Why swing components are preferred over AWT components?  
b) What is an adapter class? What is their role in event handling? [5+5]

**OR**

- 11.a) Explain the life cycle of an applet.  
b) What are the various layout managers used in Java? [5+5]

---ooOoo---