Code No: 114CX

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year II Semester Examinations, May-2015
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) What is data abstraction?   [2M]
 b) List string manipulation functions of Java String class.   [3M]
 c) Differentiate between interface and abstract class.   [2M]
 d) Explain the use of 'final' keyword.   [3M]
 e) Differentiate between thread and process.   [2M]
 f) List any six built-in exceptions in Java.   [3M]
 g) What is the difference between array and vector?   [2M]
 h) List the byte stream classes.   [3M]
 i) What are the containers available in swing?   [2M]
 j) Compare Applets with application programs.   [3M]

Part-B

(50 Marks)

2.a) Explain the basic concepts of object oriented programming.
 b) What is the usage of enumerated data type? Give examples.   [5+5]

OR

3.a) Discuss Java jump statements.
 b) Write about garbage collection in Java.
 c) Explain the use of 'this' keyword.   [3+3+4]

4.a) Explain method overriding with a suitable example program.
 b) With suitable program segments describe the usage of 'super' keyword.   [5+5]

OR

5.a) What is a nested class? Differentiate between static nested classes and non-static nested classes.
 b) How to define a package? How to access, import a package? Explain with examples.   [5+5]

6.a) With a suitable Java program explain user-defined exception handling.
 b) What is meant by re-throwing exception? Discuss a suitable scenario for this. [5+5]

OR

7.a) Does Java support thread priorities? Justify your answer with suitable discussion.
 b) Describe producer-consumer pattern using inter-thread communication.   [5+5]

8.a) Give an account of Random collection class
  b) Discuss the methods of Stack class
  c) What is the need of Generics? [3+3+4]

OR

9.a) Discuss the four types of JDBC driver with suitable diagrams.
  b) Write a JDBC program to update the amount balance in an account after every withdrawal. Assume the necessary database table. [5+5]

10.a) What is the significance of layout managers? Discuss briefly various layout managers.
  b) Give an overview of JButton class. [5+5]

OR

11.a) Explain delegation event model.
  b) Write an Applet to draw a smiley picture accept user name as a parameter and display welcome message. [5+5]

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