Code No: 133BM

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year I Semester Examinations, April/May - 2018
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(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 abstract class? Give example.	[2]
b)	Explain the use of 'for' statement in Java with an example.	[3]
c)	Define a Package? What is its use in java? Explain.	[2]
d)	List out the benefits of Stream oriented I/O.	[3]
e)	How do we start and stop a thread?	[2]
f)	Write the complete life cycle of a thread.	[3]
g)	What is the benefit of Generics in Collections Framework?	[2]
h)	Differentiate between Enumeration and Iterator interface.	[3]
i)	What are the limitations of AWT?	[2]
j)	Why do applet classes need to be declared as public?	[3]

PART-B

(50 Marks)

2.a)   What is inheritance and how does it help to create new classes quickly.
  b)   Describe different levels of access protection available in Java.   [5+5]
OR
3.a)   List the primitive data types available in Java and explain.
  b)   What is polymorphism? Explain different types of polymorphisms with examples.[5+5]

4.a)   What is an interface? What are the similarities between interfaces and classes?
  b)   How can you extend one interface by the other interface? Discuss.   [5+5]
OR
5.a)   Discuss about CLASSPATH environment variables.
  b)   Discuss the different levels of access protection available in Java.   [5+5]

6.a)   What are advantages of using Exception handling mechanism in a program?
  b)   Write a java program that demonstrates how certain exception types are not allowed to be
       thrown.   [5+5]
OR
7.a)   What are the different ways that are possible to create multiple threaded
        programs in java? Discuss the differences between them.
  b)   Write a program to create four threads using Runnable interface.   [5+5]

8.a) What is Java Collections Framework? List out some benefits of Collections framework and explain.
 b) What is the importance of hashCode() and equals() methods? [5+5]

OR

9.a) What are the common algorithms implemented in Collections Framework? Discuss.
 b) What is difference between ArrayList and LinkedList in collection framework? Explain.
[5+5]

10.a) What is an applet? Explain the life cycle of Applet with a neat sketch.
 b) Write the applets to draw the Cube and Cylinder shapes. [5+5]

OR

11.a) What is an Layout manager? Explain different types of Layout managers.
 b) Write a program to create a frame window that responds to key strokes. [5+5]

---oo0oo---