Code No: 133BM

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year I Semester Examinations, November/December - 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)

1a)	What is inheritance? Give example.	[2]
b)	Define the basic characteristics of object oriented programming.	[3]
c)	What is Console class? What is its use in java?	[2]
d)	What is the use of auto boxing in java? Explain.	[3]
e)	What is thread based preemptive multitasking?	[2]
f)	How do we set priorities for threads?	[3]
g)	What is a Java Priority queue?	[2]
h)	What is a Collection Class? Give an example.	[3]
i)	What is Swing in Java? How it differs from Applet.	[2]
j)	How do applets differ from application program?	[3]

PART-B
(50 Marks)

2.a)	Describe the structure of a typical Java program with an example.	
b)	Write the significance of Java Virtual Machine.	[5+5]
	OR	
3.a)	How do we implement polymorphism in JAVA? Explain briefly.	
b)	What is an array? How do you declare the array in java? Give examples.	[5+5]
4.a)	How to design and implement an interface in Java? Give example.	
b)	Give an example where interface can be used to support multiple inheritance.	[5+5]
	OR	
5.a)	What are the methods available in the Character Streams? Discuss.	
b)	Distinguish between Byte Stream Classes and Character Stream Classes.	[5+5]
6.a)	What is an Exception? How is an Exception handled in JAVA?	
b)	Write a java program that illustrates the application of multiple catch statements.	[5+5]
	OR	
7.a)	Differentiate between multiprocessing and multithreading. What is to be done to implement these in a program?	
b)	Write a program that creates two threads. Fist thread prints the numbers from 1 to 100 and the other thread prints the numbers from 100 to 1.	[5+5]

8. a) What are similarities and difference between ArrayList and Vector? Explain.
   b) What is different between Iterator and ListIterator? Explain different ways to iterate over a list.

OR

[5+5]

9. a) What are the best practices related to Java Collections Framework? Discuss.
   b) What is Comparable and Comparator interface? Differentiate between them.

[5+5]

10. a) What is the difference between init( ) and start ( ) methods in an Applet? When will each be executed?
    b) Write the applets to draw the Cube and Circle shapes.

[5+5]

OR

11. a) Explain various layout managers in JAVA.
    b) Write a program to create a frame window that responds to mouse clicks.

[5+5]

---oo0oo---