

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.
- b) Explain the use of 'for' statement in Java with an example.
- c) Define a Package? What is its use in java? Explain.
- d) List out the benefits of Stream oriented I/O.
- e) How do we start and stop a thread?
- f) Write the complete life cycle of a thread.
- g) What is the benefit of Generics in Collections Framework?
- h) Differentiate between Enumeration and Iterator interface.
- i) What are the limitations of AWT?
- j) Why do applet classes need to be declared as public?

[2]  
[3]  
[2]  
[3]  
[2]  
[3]  
[2]  
[3]  
[2]  
[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.
- OR
- 3.a) List the primitive data types available in Java and explain.
  - b) What is polymorphism? Explain different types of polymorphisms with examples.
- 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.
- OR
- 5.a) Discuss about CLASSPATH environment variables.
  - b) Discuss the different levels of access protection available in Java.
- 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.
- 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]  
[5+5]  
[5+5]  
[5+5]  
[5+5]  
[5+5]  
[5+5]  
[5+5]

AG AG AG AG AG AG AG A

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]

AG AG AG AG OR AG AG AG A

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

AG AG AG AG AG AG AG A

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---

AG AG AG AG AG AG AG A

AG AG AG AG AG AG AG A

AG AG AG AG AG AG AG A

AG AG AG AG AG AG AG A

AG AG AG AG AG AG AG A