

Code: CS4T3

II B.Tech - II Semester – Regular Examinations - JUNE 2015

**OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1 a) Describe the genesis of java. Also write brief overview of java. 6 M

b) List and explain the control statements used in java. Also describe the syntax of the control statements with suitable illustration. 8 M

2 a) What are conventional styles for class names, method names, constants and variables? 7 M

b) Can a java run on any machine? What is needed to run java on a computer? 3 M

c) Explain the concept of keywords. List some java keywords. 4 M

3 Create an inheritance hierarchy of Rodent: Mouse, Gerbil, Hamster, etc. In the base class, provide methods that are common to all Rodents, and override these in the derived classes to perform different behaviours depending on the

specific type of Rodent. Create an array of Rodent, fill it with different specific types of Rodents, and call your base-class methods. Explain the output. 14 M

4 What is a Package? What are the benefits of using packages? Write down the steps in creating a package and using it in a java program with an example. 14 M

5 Explain the following exceptions with the help of examples: 14 M

- a) Arithmetic Exception
- b) Null Pointer Exception
- c) Number Format Exception

6 a) Explain the concept of Object Serialization? 7 M

b) Explain the Input and Output Streams and their hierarchy? 7 M

7 a) What is the use of JPasswordField? Explain with an aid of an application program. 7 M

b) What are the differences between JPopupMenu and JMenu? 7 M

- 8 a) What is difference between HashMap and HashTable? 5 M
- b) Which all classes implement Set interface? 5 M
- c) What is identityHashMap? What is weakHashMap? 4 M