

II B.Tech I Semester Regular Examinations, March - 2021
JAVA PROGRAMMING
(Common to CSE and IT)

Time : 3 Hours

Max. Marks : 60

Note : Answer ONE question from each unit (5 × 12 = 60 Marks)

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**UNIT-I**

1. a) Explain the basic concepts of Object Oriented Programming. [6M]
- b) Build a Java code to read a string from user and display whether the given string is a Palindrome or not? [6M]

**(OR)**

2. a) List the primitive data types available in Java and explain. [6M]
- b) Build a Java code to read an integer using Scanner class and display prime numbers up to the given integer? [6M]

**UNIT-II**

3. a) What is inheritance and how does it help to create new classes quickly? Explain the significance of public, protected and private access specifiers in inheritance. [7M]
- b) Explain the procedure of creating a user defined exception with appropriate example program. [5M]

**(OR)**

4. a) What are the advantages of using Exception handling mechanism in a program? Write a java program that illustrates the application of multiple catch statements. [7M]
- b) Write the benefits of packages. How can we add a class to a package? Write about relative and absolute paths. [5M]

**UNIT-III**

5. a) Differentiate between multiprocessing and multithreading. What is to be done to implement these in a program? [6M]
- b) What are the different ways that are possible to create multiple threaded programs in java? Write a program to create four threads using Runnable interface. [6M]

**(OR)**

6. a) What are the methods available in the Character Streams? Discuss with appropriate example program. [6M]
- b) Distinguish between Byte Stream Classes and Character Stream Classes. [6M]

#### UNIT-IV

7. a) What are the best practices related to Java Collections Framework? Discuss. [6M]  
b) Differentiate between Iterator and ListIterator? Explain different ways to iterate over a list. [6M]

(OR)

8. a) How an Hashtable can change the Iterator? Explain. [6M]  
b) Explain the common algorithms implemented in Collections Framework. [6M]

#### UNIT-V

9. a) What is an Event? What are the various sources of Events? Explain the delegation event model of handling events with a JAVA program. [7M]  
b) What are the various components of Swing? Explain. [5M]

(OR)

10. a) Explain with an example about JTree class in javax.swing package. [6M]  
b) Explain about the following layouts in AWT. [6M]  
i) FlowLayout      ii) GridLayout      iii) GridBagLayout

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