

Code No: 813AQ

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, December - 2019****JAVA PROGRAMMING****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

**PART - A****5 × 4 Marks = 20**

- 1.a) "Java is strongly typed programming language". Justify your answer. [4]
- b) List the benefits of inheritance. [4]
- c) Illustrate all the methods in StringTokenizer class. [4]
- d) Discuss various Thread Priorities with suitable examples. [4]
- e) Describe Applet Life Cycle and discuss all the methods. [4]

**PART - B****5 × 8 Marks = 40**

- 2.a) Distinguish between constructor overloading and method overloading with suitable examples.
- b) Explain how does **String** class is different from the **String Buffer** class? [4+4]

**OR**

- 3.a) Discuss about all the iterative statements in java.
- b) Write a Java program to find factorial of given number. [5+3]

- 4.a) Explain static nested class and inner class with examples.
- b) Write a Java program for implementing final methods, final classes. [4+4]

**OR**

- 5.a) What are the benefits of using packages in JAVA?
- b) How to import one package to another package? Give example. [4+4]

- 6.a) What is Collection Framework? Write a Java program for creating a Array List.
- b) What are the benefits of Hash Map? Compare Hash Map and Tree Map. [4+4]

**OR**

- 7.a) How to handle primitive data types using the I/O package? Give suitable examples.
- b) Write a Java program to append the contents for existing file. [4+4]

- 8.a) What are the different ways to handle exceptions?
- b) Write a Java Program to illustrate try with multiple catch statements. [5+3]

**OR**

- 9.a) What is a single threaded Program? Write a Java Program for implementation of multithreading.
- b) Write about Daemon threads with examples. [5+3]

- 10.a) Discuss about event classes and event listener interfaces in Java?
- b) Describe event delegation model in detail. [5+3]

**OR**

11. Write a Java Program to create a Simple GUI form for Bio-Data. [8]

(Use necessary awt components such as label, textbox, text area, checkbox, list, choice etc ) **Name, Age, Gender, DOB, qualification, Experience, Address, Phone no.**