

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER- V(OLD) EXAMINATION – SUMMER 2019****Subject Code: 150704****Date: 20/06/2019****Subject Name: Object Oriented Programming With Java****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

MARKS

- Q.1** (a) Define polymorphism with its need. Define and explain static and dynamic binding using program. **07**
- (b) What is an Inheritance? Explain its types with proper diagram and suitable example(s). **07**
- Q.2** (a) Explain following keywords: this, super, final and static **07**
- (b) Write a program which checks whether entered number is prime or not? **07**
- OR**
- (b) Write a program to check that whether the name given from command line is file or not? If it is a file then print the size of file and if it is directory then it should display the name of all files in it. **07**
- Q.3** (a) What is an Access Specifier? Explain it's with suitable example with appropriate output in detail. **07**
- (b) How can we open and read text file in JAVA? Explain your answer with suitable example. Also use command line argument for passing a filename. **07**
- OR**
- Q.3** (a) Differentiate Abstract class and Interface with suitable example. **07**
- (b) What is a collection in JAVA? Differentiate HashMap and Hashtable with suitable example. **07**
- Q.4** (a) Differentiate String with StringBuffer class. List out the methods available with String class and explain any five with proper JAVA code in detail. **07**
- (b) What is an Exception? List out various built-in exceptions in JAVA and explain any one Exception class with suitable example. **07**
- OR**
- Q.4** (a) What is Multithreading? Explain Thread life cycle with proper JAVA code. **07**
- (b) What is Variable? How can we define variable in JAVA? Also list rules for valid variable names. **07**
- Q.5** (a) Differentiate Applet Vs. Swing. Explain the life cycle of applet with suitable example. **07**
- (b) What is synchronization? Write a program that uses thread synchronization with proper output. **07**
- OR**
- Q.5** (a) What do you mean by Event Delegation Model in JAVA? How the concept of adapter classes is used in event handling? Explain it with suitable example. **07**
- (b) Write down a code for passing an Echo message by using TCP in Network Programming. **07**

