

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V (OLD) EXAMINATION – WINTER 2018****Subject Code:150704****Date: 11/12/2018****Subject Name: Object Oriented Programming With Java****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

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

- Q.1** (a) Discuss JVM, JRE, Javadoc. Why java is platform independent language? Mention advantages of Java Programming Language. **07**
 (b) Explain Keyword Final, Finally and Finalize with suitable example. **07**

- Q.2** (a) Discuss features and advantages of Abstract. Write one example. **07**
 (b) What is collection in Java? What are different collection classes available in java. **07**

OR

- (b) Write a java program to calculate total and average to five values. Pass input values as constructor parameter. **07**

- Q.3** (a) Discuss i) Applet and Application (ii) Interface **07**
 ii) String class and StringBuffer class

- (b) Write a java program to input two values as command line parameter and print summation of both values. Discuss Wrapper class functionality here. **07**

OR

- Q.3** (a) Draw and explain lifecycle of Applet. **07**
 (b) Discuss Thread life cycle. Explain wait, notify, notifyall, synchronized methods of thread with example. **07**

- Q.4** (a) Write short note on package. Also discuss steps to create and implement user defined package. **07**

- (b) What is Exception? How it is handled in Java? List out inbuilt java exception classes. How user can create his own exception class? **07**

OR

- Q.4** (a) What is inheritance in java? Explain different types of inheritance with proper examples. **07**

- (b) How we can read input values using Scanner class? Demonstrate with one java example. **07**

- Q.5** (a) Explain user of static and super keyword. What is method overriding in java? **07**

- (b) Write a Java program to read students data and write it to student.txt file using Java file handling. **07**

OR

- Q.5** (a) Explain Event Handling in java and describe how mouse event and key press events are handled? **07**

- (b) Explain different layouts in Java Applets with suitable example. **07**

