

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V (Old) EXAMINATION – WINTER 2019****Subject Code: 150704****Date: 02/12/2019****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) List out features of JAVA. Explain any three in detail. **07**  
(b) Give the differences between JAVA and C++. **07**

- Q.2** (a) Draw and explain the process of building and running JAVA Program. **07**  
(b) List out different types of operators in JAVA. Explain Logical and Bitwise Operators in detail. **07**

**OR**

- (b) Write a JAVA program to display the following output using 2-D array. **07**  
0  
1 2  
3 4 5  
6 7 8 9

- Q.3** (a) Explain method overloading and method overriding in detail. **07**  
(b) What is command line argument? Explain it with program. **07**

**OR**

- Q.3** (a) Explain static keyword in detail using a sample program. **07**  
(b) What is Interface? Write steps to declare and define an interface and explain with sample program. **07**

- Q.4** (a) Explain try, catch, throw, throws and finally in detail. **07**  
(b) Draw and explain the life cycle of thread in detail. **07**

**OR**

- Q.4** (a) What is Stream Class? Explain input stream class and output stream class in details. **07**  
(b) Explain Runtime Polymorphism with example **07**

- Q.5** (a) What is Applet? Draw and explain life cycle of an applet in detail. **07**  
(b) Explain Delegation Event Model in details. **07**

**OR**

- Q.5** (a) Explain Label and Button class and their methods in detail. **07**  
(b) What is Layout Manager? Explain different Layout Managers in JAVA. **07**

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