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 ii) String class and StringBuffer class	**07**
	(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**

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