

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE - RAIGAD -402 103
Winter Semester Examination - Dec.- 2019**

Branch: Information Technology

Sem.: - V

Subject with Subject Code: - Programming in Java (BTITE305B)

Marks: 60

Date: -19/12/2019

Time: - 3 Hr.

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

Q.1 Solve any two

(Marks)

6*2=12

- a) With neat diagram and example explain Java program structure.
- b) Explain different data types supported by Java.
- c) Design the program in java that uses different methods of Vector class.

Q.2 Solve the following

(12)

- a) What is constructor? Tell how it is used to initialize the object.
- b) Define Interface. Design the program that uses interface to achieve multiple inheritance.

Q.3 Solve the following

(12)

- a) Define package. Develop the program that consist of two packages, one package is used to calculate factorial of given number and other will display Fibonacci Series up to given number.

- b) What is applet? How it is differ from application program? Also design small applet.

Q.4 Solve any two

6*2=12

- a) With neat sketch explain the life cycle of thread.
- b) What is Exception? Design the program that uses try, catch and finally block to handle the exception.
- c) Write a program in Java to demonstrate the use of multiple catch.

Q.5 Solve the following

(12)

- a) What is the use of Graphics class? Enlist and explain different methods and its use provided in Graphics class.
- b) Design an applet to display the front view of bus.

Q.6 Solve the following

(12)

- a) Draw and explain hierarchy of writer stream classes.
- b) Design the Java program to display the content of input file in terminal using byte stream classes.