

GUJARAT TECHNOLOGICAL UNIVERSITY**BVOC - SEMESTER-II EXAMINATION – SUMMER 2021****Subject Code:1120203****Date: 18/09/2021****Subject Name:Object Oriented Programming with JAVA****Time: 10:30 AM TO 12:30 PM****Total Marks:50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	Marks
Q.1 (a) Explain features of JAVA.	05
(b) Write a program in JAVA to find whether the given number is prime or not.	05
Q.2 (a) Explain life cycle of applet.	05
(b) How do applets differ from application programs?	05
OR	
(b) Develop a JAVA applet that receives three numeric values as input from the user and then displays the smallest of the three on the screen. Write a HTML page and test the applet.	05
Q.3 (a) Discuss the different levels of access protection available in JAVA.	05
(b) Explain overriding method in Java with example.	05
OR	
Q.3 (a) Explain finalize method with suitable example.	05
(b) Explain String Class and StringBuffer Class with example.	05
Q.4 (a) What is inheritance in java? Explain different types of inheritance with proper example partial code.	05
(b) Write a JAVA code that accepts a purchase list of five items from the command line and stores them in a vector.	05
OR	
Q.4 (a) What is wrapper class? Explain with example.	05
(b) Define package. Explain steps to create a package with example.	05
Q.5 (a) Write a multithreaded program to compute and print prime numbers up to n where n is given as command line argument. Instantiate required number of threads where each thread except the last, examines next 20 numbers and the last thread examines remaining numbers to check whether a number is a prime or not.	05
(b) What is “finally” block? When and how is it used? Explain with suitable example.	05
OR	
Q.5 (a) Explain thread in Java with suitable example.	05
(b) Discuss “try”, “catch”, and “throw” with java code.	05
