Only for 2021-2022 AD admitted Regular Students

TRIBHUVAN UNIVERSITY

FACULTY OF MANAGEMENT

Office of the Dean

October 2023

Full Marks: 60 Pass Marks: 30

Time: 3 Hrs.

BIM / Second Semester / IT 234: Object Oriented Programming with Java

Candidates are required to answer the questions in their own words as far as practicable.

Group "A"

Brief Answer Questions:

 $[10 \times 1 = 10]$

- 1. List any two Java Buzzwords.
- 2. What is the task of Scanner class?
- 3. How does for each differ with simple for loop?
- 4. Which keyword is used to prevent inheritance in Java?
- Define inner class.
- 6. How do you call destructor explicitly?
- 7. What is dynamic method dispatch?
- 8. Why do we need generics?
- Differentiate between StringBuffer and String.
- 10. How does exception differ with error?

Group "B"

Short Answer Questions: (Attempt any FIVE Questions)

 $[5 \times 3 = 15]$

- 11. Does object oriented concept is possible without this keyword? Justify.
- 12. Write a program to illustrate the chain of constructor in inheritance.
- 13. Describe any three types of operators used in Java.
- 14. Write a Java program to find the sum of two and three integer using concept of method overloading.
- 15. Describe the need of Abstract class with an example.
- 16. Why do we need static method? Illustrate with an example.

Group "C"

Long Answer Questions: (Attempt any THREE Questions)

 $13 \times 5 = 151$

17. Create an interface "Shape" with a method void Myshape(String name). Create two class "Rectangle" and "Circle" to implement this method. Then instantiate object for each class to call Myshape(String) function.

- 18. Write a program to create a class named "person" with number field "age". Throw an exception if the user enters negative number for the age.
- 19. Create a class named "Course" with data member title, credit and courseCode and a method named void setValues() to assign the values and another method named showValues to display the record. In main(), instantiate 5 objects of course and display the record of course whose title start with "C".
- 20. Write a program to illustrate the concept of creating and importing the packages.

Group "D"

Comprehensive Answer / Case / Situation Analysis Questions:

 $/2 \times 10 = 20/$

- 21. Why do we need wrapper classes? Write a program to take a string from the user and if the length of that string is a prime number, write this string into file named "Prime.txt", otherwise write into file named "Composite.txt".
- 22. Why autoboxing and unboxing of primitive not happen with generics in Java? Write a program to find whether the integer of even index of an array is odd or not and also display the sum of those odd integers.

