TRIBHUVAN UNIVERSITY
FACULTY OF MANAGEMENT
Office of the Dean

Full Marks: 40
Pass Marks: 20
Time: 2 hrs.

April 2019

BIM / Third Semester / IT 216: JAVA Programming - I

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

Group "A"

[10 × 1 = 10]

Brief Answer Questions:

1. Java is called platform independent. Why?
2. What do you mean by garbage collection?
3. Define AND operator.
4. What is dynamic method dispatch?
5. What do you mean by thread priorities?
6. List any two relational operators with syntax.
7. Write the use of final keyword.
8. What is autoboxing and unboxing?
9. What is synchronization?
10. What do you mean by enumeration?

Group "B"

[5 × 4 = 20]

Exercise Problems:

11. Write a Java program that prints first 10 Fibonacci numbers.
12. Make two threads, one display name of English months after one second and another thread display name of days after one and half second.
13. Create a class **Number** with three integer instance variables **x , y** and **z**. The class will have one constructor to initialize instance variables. The class also will contain method **getMax ()** method that will return the largest number. Create a class **NumberDemo** with main method that will create an object of **Number** and will print the largest number.
14. Create a class **Box** with instance variables **length, breadth** and **height**. Add one method **getVolume()** to compute the volume of box. Use suitable constructors. Create a subclass **BoxWeight** that extends **Box** that add one variable weight. Add two methods **setweight()** and **getWeight()** that sets and displays the weight of box to this class. Add suitable constructors. Your class should use super keyword to call superclass constructor. Then create a class **BoxDemo** with **main ()** method that creates two objects of **BoxWeight** and display volumes and weights of both boxes
15. Write a Java program that reads content of the Directory and displays on monitor.

Group "C"

Comprehensive Answer Questions: ***[2 × 5 = 10]***

16. What is exception? Why is it important to handle exception? Explain.
17. Explain importance of encapsulation and inheritance with example.