## **Object Oriented Programming Assignment**

- i) What are the advantages of OOP programming over functional programming. [10]
  ii) With code examples explain use of vector clocks in Java. [10]
- 2. Write a java program that will be able to connect to MySQL database and be able to write the following on the database (users), reg\_no, module, name, surname, gender, year of study. [20]
- 3. Write a program with class "Shape" that will be able to calculate the area and perimeter of a rectangle. [20]
- 4. Draw a class diagram showing a student, course and class relationship. [20]
- 5. i) Describe the types of Java interfaces and how the original interfaces contained abstract methods and static final fields. How did this restriction avoid the complexities of extending multiple classes?
  - ii) Explain concurrent queuing in Java with example code. [10]