GUJARAT TECHNOLOGICAL UNIVERSITY
Master in Computer Application (Integrated MCA)

Year II – (Semester-III) (W.E.F. July 2014)

Subject Name: Software Project-3

Subject Code: 4430605

1. **Learning Objectives:**

- To be able to develop a project in the Java programming language
- To be able to use object-oriented principles in the project

2. **Prerequisites:** Knowledge of Java Programming Language

3. **General Guidelines for Software Project using Java Programming Language**

- The project should be free from plagiarism of any kind.
- Should use Object-oriented principles
- Project should be developed for solving a specific type of problem
- A proper documentation of the project, giving a clear description of the problem being solved must be provided. The documentation should also include description of the algorithms used in the problem solving, and a description about the responsibility of all the classes that have been developed.
- It is encouraged to include a description of the iterations during the development process, and what was achieved during the iterations. This is not mandatory.
- Code should be self documented and should follow proper coding standards
- Should make proper use of data-structures available from the java.util package
- Proper use of Exception handling feature of the Language should be done
- Use of IDEs like eclipse, intellijIDEA, etc are not prohibited. Students may be encouraged to explore these IDEs on their own.
- The final project completion should include an executable jar file being submitted for the project.
- Though too-much significance may not be given to the GUI design, it should be simple and intuitive.

4. **Knowledge about the following is expected to be demonstrated.**

- Proper knowledge about the purpose of the application
- Object-oriented concepts
- Exception-handling features of Java platform
- Proper use of Multi-threading concepts
- Proper use of Input/Output APIs

- Proper use of data-structures from the java.util package
- Proper use of the basic interfaces like Comparable and Comparator are expected to be known
- Proper use of GUI components and event-handling features

5. Recommended content knowledge

As per syllabus of Java Programming Language