



## KARPAGAM ACADEMY OF HIGHER EDUCATION

*(Deemed to be University )*

*Established Under Section 3 of UGC Act 1956)*

**Coimbatore – 641 021.**

**18MMP211**

**OPTIMIZATION TECHNIQUES - PRACTICAL**

**Semester – II**

**4H – 2C**

**Instruction Hours / week: L: 0 T: 0 P: 4**

**Marks: Internal: 40**

**External: 60 Total: 100**

**End Semester Exam: 3 Hours**

### Course Objectives

- To provide the students an exposure to develop well-structured optimization techniques knowledge arising process in various level of science.

### Course Outcomes (COs)

On successful completion of this course, the student will be able to

1. Use the object oriented concepts for implementation of Optimization Techniques.
2. Implement the data structure concepts for Optimization Techniques problems.
3. Acquire skills to solve various multivariable optimization problems
4. Solve of different optimization problems.

### List of Practical

1. Solution for a system of equations- Simplex method.
2. Decision making with minimax criteria.
3. Decision making under risk.
4. Travelling salesman problem to find the shortest path.
5. Write a C program to calculate the minimum cost using North West Corner Rule.
6. To calculate the EOQ for purchasing model without shortage using C program.
7. To calculate the EOQ for manufacturing model without shortage using C program.
8. To calculate the EOQ for manufacturing model with shortage using C program.
9. To calculate the EOQ for purchasing model with shortage using C program.
10. Probabilistic Model-EOQ.