# JK Lakshmipat University, Jaipur
## Institute of Engineering & Technology
## Assignment

**Course Name:** Optimization for Computer Science       **Course Code:** AS1113

**Overview**

This is a group (max 2 students in one group) graded assignment of 10 marks. On successful completion of this assignment, the students will be able to:

- ✓ formulate and express diverse real-world problems as optimization problems.
- ✓ develop their own case studies, enabling them to identify and explore research problems.
- ✓ develop problem-solving skills by solving complex, real-world nonlinear optimization problems.
- ✓ write basic research papers.

**First draft submission:**     **March 20, 2025**        **(2 marks)**
**Final Submission:**           **April 14, 2025**        **(8 marks)**
**Mode of submission: Soft copy on turnitin (Link will be provided)**

**Objective: Develop a case study using real-life data with proper reference**.

Write all your assumptions for the model and then develop objective function and constraints based on decision variables involved. Formulate it mathematically. Solve the case study using appropriate methods and document the process comprehensively, including a well-structured introduction, methodology, conclusion, and references.

**(Refer case study-based research papers solved during lab activities 3 and 4).**

Also, provide the statement of contribution of each group member at the end.