# **GUJARAT UNIVERSITY**

K. S. SCHOOL OF BUSINESS MANAGEMENT [Five Years' (Full-time) Integrated Degree Course]

## Semester-8 [M.Sc. (CA & IT)]

### Subject Code: - KS\_C\_CC-488 Subject Name: - Project – Emerging Technologies – Soft Computing Course Credit: - 5

#### Prerequisite:

Clear understanding of the subjects KS\_C\_CC-113, KS\_C\_CC-123 and KS\_C\_CC-237 which will help to understand the concept of Soft Computing and execute the project .

Theoretical concept to be discussed in the Class:

- Introduction to Soft Computing
- Introduction to Fuzzy logic, Fuzzy membership functions, Operations on Fuzzy sets, Fuzzy relations, Fuzzy propositions, Fuzzy implications, Fuzzy inferences, Defuzzyfication Techniques
- Solving optimization problems: Concept of GA, GA Operators
- Introduction to ANN, ANN Architecture, ANN Training.

#### Project:

- Application of Soft Computing.
- Each project to be guided by concern faculty member.

#### **Reference Books:**

- 1. Neural Networks, Fuzzy Logic and Genetic Algorithms: Synthesis & Applications, S. Rajasekaran, G. A. Vijayalakshami, PHI.
- 2. D. E. Goldberg, Genetic Algorithms in Search, Optimisation, and Machine Learning, Addison-Wesley