

SHANTILAL SHAH ENGINEERING COLLEGE, BHAVNAGAR

CIVIL DEPARTMENT

COURSE – PDDC

SCT MST SYLLABUS SEPTEMBER 2022

Module-1

Introduction to Soft Computing:

Concept of computing systems, "Soft" computing versus "Hard" computing, Characteristics of Soft computing, Some applications of Soft computing techniques

Module-2

Fuzzy logic:

Introduction to Fuzzy logic, Fuzzy sets and membership functions, Operations on Fuzzy sets, Fuzzy relations, rules, propositions, implications and inferences, Defuzzification techniques, Some applications of Fuzzy logic.

Module-3

Genetic Algorithms:

Concept of "Genetics" and "Evolution" and its application to probabilistic search techniques, Basic GA framework and different GA architectures, GA operators: Encoding, Crossover, Selection, Mutation, etc. Solving single-objective optimization problems using GAs.