



Laxmi Singh Charitable Trust's (Laxmi)

**THAKUR COLLEGE OF
ENGINEERING & TECHNOLOGY**

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education (AICTE) and Government of Maharashtra (GoM)

Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y. 2019-20

Amongst Top 200 Colleges in the Country, Ranked 19th in NIRF India Ranking 2019 in Engineering College category

• ISO 9001:2015 Certified • Programmes Accredited by National Board of Accreditation (NBA), New Delhi

• Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore

Website: www.tceetmumbai.in

IN-SEMESTER EXAMINATION-1

TT (Semester-V)

SUBJECT – Soft Computing

Branch:- AI & DS

Div.: ALL

Duration: 60 Minutes

Instructions –

1. All questions are compulsory.
2. Assume suitable data wherever necessary and state the assumptions made.
3. Diagrams / sketches should be given wherever necessary.
4. Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.
5. Figures to the right indicate full marks.

Date: 29/08/2023

Timing: 12:00 PM to 1:00 PM

Maximum Marks: 20

Q.1	Answer any 5 of the following questions	Marks	Course Outcomes	Learning Levels
a.	Draw an artificial NN.	2	CO 1	R
b.	Discuss different types of hybrid system.	2	CO 1	U
c.	Explain Single-Neuron Perceptron.	2	CO 2	R
d.	Describe Multilayer Perceptron.	2	CO 2	R
e.	Define membership function and What is Fuzzy inference machine ?	2	CO 3	R
f.	Explain fuzzy logic with example.	2	CO 3	R
g.	What are the Components of Neural Network?	2	CO 2	U
Q.2	a. Describe feed forward neural network with neat Sketch.	5	CO 2	A
	OR			
b.	What is hybrid system in soft computing? Explain the applications of hybrid system	5	CO 1	U
Q.3	a. What is naïve based classifier? Also explain logistic regression in neural network.	5	CO 2	U
	OR			
b.	Write a note on cartesian product of relation.	5	CO 3	U