Dr. Ambedkar Institute of Technology, Bangalore – 56

(An Autonomous Institution Affiliated to Visvesvaraya Technological University, Belgaum)

EVEN Semester 2023-24

Subject Title: Artificial Intelligence and Machine learning Subject Code: **21CST603** Semester **: VI** Section**: A and B**	**Assignment – 2**	Faculty in-charge: **Dr.Madhu B**

Q. No.	Questions
1.	The following table gives a data set for deciding whether to play or cancel a ball game, depending on the weather conditions. Apply ID3 algorithm

weather conditions.

Outlook	Temp (F)	Humidity (%)	Windy?	Class
sunny	75	70	true	Play
sunny	80	90	true	Don't Play
sunny	85	85	false	Don't Play
sunny	72	95	false	Don't Play
sunny	69	70	false	Play
overcast	72	90	true	Play
overcast	83	78	false	Play
overcast	64	65	true	Play
overcast	81	75	false	Play
rain	71	80	true	Don't Play
rain	65	70	true	Don't Play
rain	75	80	false	Play
rain	68	80	false	Play
rain	70	96	false	Play

2.

Weight(x2)	Height(y2)	Class
51	167	Underweight
62	182	Normal
69	176	Normal
64	173	Normal
65	172	Normal
56	174	Underweight
58	169	Normal
57	173	Normal
55	170	Normal

For the above dataset apply KNN.If a person is having a weight of 63 , identify which class he belongs to ?

Incharge HOD