

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

B.Tech-VI Semester

COURSE CODE: 18B11CI613

MAX. MARKS: 25

COURSE NAME: Data Mining

COURSE CREDITS: 03

MAX. TIME: 1 Hour 30 Min

*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

Q1. Consider the weather data set given below:

Outlook	Temperature	Humidity	Windy	Play
Sunny	Hot	High	False	No
Sunny	Hot	High	True	No
Overcast	Hot	High	False	Yes
Rainy	Mild	High	False	Yes
Rainy	Cool	Normal	False	Yes
Rainy	Cool	Normal	True	No
Overcast	Cool	Normal	True	Yes
Sunny	Mild	High	False	No
Sunny	Cool	Normal	False	Yes
Rainy	Mild	Normal	False	Yes
Sunny	Mild	Normal	True	Yes
Overcast	Mild	High	True	Yes
Overcast	Hot	Normal	False	Yes
Rainy	Mild	High	True	No

Table 1: Weather Dataset

Make a classification tree using ID-3 approach to predict whether the game will be played or not on a particular day.

[10]

Q2. "Iterative Dichotomizer-3 doesn't perform well on datasets with continuous attribute" Justify this statement with suitable reasoning, example and diagram.

[5]

Q3. Consider the weather dataset given in table 1 of question 1 above. Predict the humidity for the information {Outlook= Sunny, Temperature=Hot, Windy=False, and Play=No}.

[10]