



## DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY

(Autonomous)

GANGURU::VIJAYAWADA – 521 139

### DAY TO DAY ASSESSMENTS

Name of the program: B.Tech in IT

Academic year: 2025-26

Year & Semester : III-II

Name of the Course: ML

Name of the Exam : C.T-III

Day to Day Assessment weightage: **100%**

MaxMarks :**30M**

Date: 30.01.2026

**Course outcome:** D23C311.3- Develop the models based on decision trees and Bayes classifier concepts

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1) Explain the Classification, Impurity Measures, Properties, Regression Based on Decision Trees,with example **D23C311.3-Understanding-PO2-10M**

2) Explain Random Forests for Classification and Regression, with example **D23C311.3-Applying-PO3-10M**

3) Explain the Bias-Variance Trade-off. How does it affect the performance of a machine learning model?  
Provide an example to illustrate the trade-off **D23C311.3-Understanding-PO2-10M**

### Scheme of valuation:

1. Classification	2M
Impurity Measures	2M
Properties	2M
Regression Based on Decision Trees	2M
Example	2M
2. Random Forests for Classification and Regression	10M
3. Bias-Variance Trade-off	5M
Affect on performance of a machine learning model	3M
Example	2M