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| C:\Users\TEMP.WDC.083\Desktop\VIT logo.png  (Autonomous College Affiliated to University of Mumbai) | **Mid Semester Examination (2023-24)** | | |
| Date: | | Time: 1 Hr and 15 Min | Branch: Computer Engineering |
| Semester: VII | | Subject: Machine Learning | Marks: 30 |
| |  |  |  |  | | --- | --- | --- | --- | | Q. 1) | Attempt any Five (2 Marks Each) | CO | BL | | a) | Explain Re-Inforcement Learning. | CO1 | L2 | | b) | Compare Clustering and Association | CO2 | L2 | | c) | Explain Karl Coefficient of corelation | CO2 | L2 | | d) | Explain Training Error and Test Error | CO2 | L2 | | e) | Explain Performance Metric. | CO2 | L1 | | f) | Explain Sensitivity and Specificity | CO2 | L2 | |  | | | | | Q. 2) | Attempt any one. (10 Marks Each) |  |  | | a) | Solve the following Linear Regression with Multiple Independent features:    Find y for X1=3 and X2=2. | CO2 | L3 | | b) | Create Decision Tree for the following: | CO2 | L3 | |  |  |  |  | | Q.3 | **Attempt any two (5 Marks Each)** |  |  | | a) | Explain Bias and Variance tradeoff in ML model. | CO2 | L2 | | b) | Explain Kappa Statistics. | CO2 | L2 | | c) | Explain ROC and AUC | CO2 | L2 | |  | | | |  |  |  | | --- | --- | | CO1 | Gain knowledge about basic concepts of Machine Learning and understand the difference between supervised and unsupervised techniques | | CO2 | To select, apply and evaluate an appropriate machine learning model for the given | | | | |