

School of Engineering

B.TECH Electronics and Communication Engineering in Artificial Intelligence and Machine
Semester End Examination - Jun 2024

Duration : 180 Minutes

Max Marks : 100

Sem VI - G2UD601T - Machine Learning

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

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|-----|---|--------|
| 1) | Discuss the limitation of machine learning. | K1(2) |
| 2) | Define False positive in machine learning. | K2(4) |
| 3) | Summarize about the model selection procedure to fine tune model complexity | K2(6) |
| 4) | Differentiate discrete and continuous random variable with suitable example. learning algorithm. | K3(9) |
| 5) | Discuss the working of junction tree algorithms | K3(9) |
| 6) | State why ada boost algorithm is known as iteratively train weak classifier. | K5(10) |
| 7) | Summarize about kernel PCA and its algorithm with necessary equation | K4(12) |
| 8) | Describe three method to prevent overfitting | K5(15) |
| 9) | Develop the linear discriminant analysis and principle component analysis with necessary equation | K5(15) |
| 10) | Cluster the following eight points (with (x, y) representing locations) into three clusters: A1 (2, 10) A2 (2, 5) A3 (8, 4) A4 (5, 8) A5 (7, 5) A6 (6, 4) A7 (1, 2) A8 (4, 9) Initial cluster centers are: A1 (2, 10) A4 (5, 8) A7 (1, 2) | K6(18) |