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| Q. No | Statement | CO mapping |
| Section A  5 x 2 = 10 marks | | |
| 1 | Define Machine learning with its objectives. | CO2 |
| 2 | Define goal of the support vector machine (SVM) | CO2 |
| 3 | List out different algorithms can be classified under Association Rule Learning Algorithms? | CO2 |
| 4 | Define any algorithm you know in to solve a problem in Reinforcement Learning | CO3 |
| 5 | Define K Medoid Clustering with KNN clustering. | CO3 |
| Section B  4 x 5 = 20 marks | | |
| 6 | Elaborate Semi Supervised Learning advantages over Unsupervised Learning with an example of real world applications | CO2 |
| 7 | How would you detect overfitting in Linear Models? | CO3 |
| 8 | Elaborate relationship between k-Means Clustering and PCA? | CO2 |
| 9 | Compare Reinforcement Learning and Supervised Learning | CO3 |
| Section C  3 x 10 = 30 marks | | |
| 10 | The values of independent variable x and dependent value y are given below:   |  |  | | --- | --- | | X | Y | | 1 | 3 | | 3 | 4 | | 5 | 2 | | 7 | 5 | | 8 | 7 |   Find the regression line y=ax+b. Estimate the value of y when x is 11. | CO3 |
| 11 | Compare overfitting and underfitting with an intuitive explanation of the Bias-Variance Tradeoff | CO4 |
| 12 | Scrutinize that Principal Component Analysis (PCA) is used for Dimensionality Reduction with an example . | CO4 |