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| **P.V.P Siddhartha Institute of Technology(Autonomous)** |
| **Department of Computer Science and Engineering** |
| **Course: B.Tech** | **Year: III** | **Semester: II** | **Descriptive: II** | **A.Y:2023-24** |
| **Subject Code: 20CS3602** | **Subject Name: Machine Learning** | **Regulation:PVP20** |
| **Duration:****1 hr 30 min** | **Maximum Marks:15 Marks** | **Date:****27-03-2024** | **Session: F.N** |
| **Answer all the Questions. Each Question carries 5 Marks 3×5M=15M** |
| **Q. No** |  | **Marks** | **CO** | **Level** |
| **1.** | Illustrate any four measures to evaluate the Classification model with examples. | **5** | **CO2** | **3** |
|  |
| **2.** | Analyze the given data and Apply Support Vector Machine to plot hyper plane of the following data point on linearly separable data:**(1,1) (2,1) (1,-1) (2, -1) (4, 0) (5, 1) (5, -1) (6, 0)** | **5** | **CO4** | **4** |
|  |
| **3.** | Compute the final result of Hierarchical Clustering with the Single linkage by drawing a Dendrogram

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|  | **A** | **B** | **C** | **d** | **e** | **f** |
| **a** | 0 |  |  |  |  |  |
| **b** | 0.71 | 0 |  |  |  |  |
| **c** | 5.66 | 4.95 | 0 |  |  |  |
| **d** | 3.61 | 2.92 | 2.24 | 0 |  |  |
| **e** | 4.24 | 3.54 | 1.41 | 1.00 | 0 |  |
| **f** | 3.20 | 2.50 | 2.50 | 0.50 | 1.12 | 0 |

 | **5** | **CO3** | **3** |