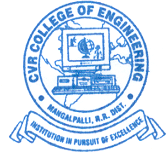
**CVR COLLEGE OF ENGINEERING**



***UGC Autonomous Institution -*** Affiliated to JNTUH

Vastunagar, Mangalpalli(V), Ibrahimpatan (M), R.R.Dist–501 510.

**B.Tech (CSIT) III Year I Semester Assignment-II Examinations 2023**

**Subject Name: Concepts in data science**

**Time: 1 hour 45 minutes Max. Marks: 08**

**PART A**

1. Describe the role of Confusion Matrix. BL1 CO 3 2M
2. Discuss the usage of Covariance Matrix. BL1 CO4 2M

### **What is Univariate, and multivariate data?** BL2 CO 4 2M

1. What are different tools in Data Visualization? BL1 CO5 2M
2. Explain the importance of EDA in data science. BL2 CO5 2M

**PAER B**

1. A. Discuss Ridge regression in detail. BL2 CO3 5M

B. Explain the task of classification using random forest. BL2 CO3 5M

1. Explain K – Nearest Neighbor classifier with suitable example. BL3 CO3 10M
2. Describe the role of PCA in dimensionality reduction in detail. BL2 CO4 10M
3. Explain in detail about the following, BL2 CO4 10M

MahalaNobis distance

Multivariate normal distribution

1. discuss basic principles, ideas and tools for data visualization. BL2 CO5 10M
2. Explain basic tools of Exploratory Data Analysis. BL2 CO5 10M