

Code No.: CS8111PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**  
**I-M.Tech-I-Semester End Examinations (Regular) July- 2021**  
**MACHINE LEARNING (PE - I)**  
**(CSE)**

[Time: 3 Hours]

[Max. Marks: 70]

1. Answer Any **FIVE** Questions. Each Question Carries 14 Marks
2. Illustrate your answers with NEAT sketches wherever necessary.

5 x 14M=70M

1. What is the procedure of building Decision tree using ID3 with Gain and Entropy. Illustrate with example. [14M]
2. Define Bayesian theorem? What is the relevance and features of Bayesian theorem? Explain the practical difficulties of Bayesian theorem. [14M]
3. Define clustering. What are the different types of clustering explain in detail? [14M]
4. a) Explain detail note on Mixture models in machine Learning.  
b) What is Boosting? Discuss with neat relevant example? [7+7M]
5. a) Discuss Learning Vector Quantization algorithm with neat sketch?  
b) Explain the concept of modeling sequence timing series data? [7+7M]
6. a) Discuss scalable Machine learning with distributed & online?  
b) How does inference in graphic model occurs explain the technology? [7+7M]
7. a) Give a detail note on Classification methods for IOT with neat sketch?  
b) What are advantages and disadvantages of IOT discuss with real time example? [7+7M]
8. a) Explain different networking and communication model in IoT.  
b) Explain PCA and its process with their applications. [7+7M]