

B.Tech III Year II Semester (R20) Regular Examinations August 2023

**MACHINE LEARNING**

(Common to CSE &amp; CSE (DS))

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

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|--|----|
| (a) What is Human Learning?  | 2M |
| (b) List out Basic types of data in Machine Learning.                    | 2M |
| (c) How to evaluate performance of Model?                                | 2M |
| (d) What is feature in Machine Learning?                                 | 2M |
| (e) Define classification.   | 2M |
| (f) Why Bayesian Methods are Important?                                  | 2M |
| (g) What is a Linear Regression?   | 2M |
| (h) How many ways to improve the accuracy of the Liner Regression model? | 2M |
| (i) Write any two applications of unsupervised Learning.                 | 2M |
| (j) What are the association rules in learning?                          | 2M |

**PART – B**

(Answer all the questions: 05 X 10 = 50 Marks)

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|----|---|-----|
| 2  | What is Machine Learning? Write a applications of Machine Learning. | 10M |
|    | <b>OR</b>   |     |
| 3  | Discuss issues in the Machine Learning.                             | 10M |
| 4  | Write a note on Model Representation and interpretability.          | 10M |
|    | <b>OR</b>   |     |
| 5  | What are the basics features of engineering?                        | 10M |
| 6  | Prove the Bayes Theorem with the help of suitable example.          | 10M |
|    | <b>OR</b>   |     |
| 7  | Discuss support vector machines with the help of example.           | 10M |
| 8  | Write an algorithm of simple linear regression.                     | 10M |
|    | <b>OR</b>   |     |
| 9  | Write a note Polynomial Regression Model.                           | 10M |
| 10 | What is clustering? Discuss different clustering techniques.        | 10M |
|    | <b>OR</b>   |     |
| 11 | Write a difference between Unsupervised and supervised learning.    | 10M |

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