Third Semester FYUGP Degree Examination NOVEMBER 2025
KU3DSCCSC206 - INTRODUCTION TO MACHINE LEARNING

2024 Admission onwards

Time : 1.5 hours   Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. Why is Regression used in Machine Learning and what is its primary goal?

2. Define Linear Regression.

3. What is the difference between mean and mode?

4. Write the purpose any of two ML libraries in Python?

5. Define Hierarchical clustering

6. State the purpose of Principal Component Analysis (PCA)

7. Define reinforcement learning.

8. What is a label in a Supervised Learning problem?

Section B

Answer any 4 questions. Each carry 6 marks.

9. Explain the categories of Unsupervised Learning with example? State its advantages

10. Explain the categories of hierarchical clustering with example

11. Explain the working of t-SNE

12. Illustrate the working of Supervised Learning with an example dataset.

13. Summarize the advantages and limitations of Machine Learning.

14. Compare Scikit-learn and TensorFlow based on features, advantages

Section C

Answer any 1 questions. Each carry 14 marks.

15. What is Supervised Learning, and how do we use Linear Regression and Logistic Regression in Machine Learning? Provide examples?

16. a) Explain any three visualization charts with example code (7) b) Explain datatype with example used in a dataset? (7)