22U5115 (Pages: 2) Name: .....

Reg.No: .....

FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC21U SDC5 ML18 - MACHINE LEARNING USING PYTHON

(Information Technology - Skill Component Course)

(2021 Admission onwards)

Time : 2.00 Hours Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 2 marks.

1. Define Scipy.
2. What is the importance of Data Cleaning?
3. Define KFold cross validation technique.
4. Define feature selection.
5. Define scikit-learn.
6. Explain the difference between classification and clustering.
7. What are the different types of classification algorithms?
8. What is Bias-Variance tradeoff?
9. Define Naïve Bayes Classifier.
10. Define linear regression.
11. What is Image processing?
12. What is pattern recognition?

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer ***all*** questions. Each question carries 5 marks.

13. Explain about Dimensionality Reduction.
14. Explain Principal Component Analysis (PCA).
15. Implement feature extraction from text document.
16. Differentiate between regression and classification.
17. What are the types of Sentiment Analysis? Explain its applications.

18. Explain Recommendation system.

19. Explain Apriori algorithm.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

20. What are the Applications of Machine Learning in Modern Businesses?

21. Explain the K Nearest Neighbor Algorithm with example.

(1 × 10 = 10 Marks)

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