



Seat No. \_\_\_\_\_

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BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY) (W.E.F. 2022) BSCIT (2022) Semester - 6 Examination  
BSCIT (2022) SEMESTER-6 MARCH-2025  
CS – 33: MACHINE LEARNING WITH PYTHON

Time : 2.5 Hours]

[Total Marks : 70

1 (A) Answer the following: 4

- 1 Full Form: ML.
- 2 Full Form: AI.
- 3 Full Form: DL.
- 4 List out types of ML.

(B) Answer in brief (Any one out of two) 2

- 1 Explain Machine Learning.
- 2 Difference between Supervised & Unsupervised Learning.

(C) Answer in detail (Any one out of two) 3

- 1 Explain Applications of Machine Learning.
- 2 Explain types of Machine Learning in Detail.

(D) Write a note on (Any one out of two) 5

- 1 Explain How Machines Learn.
- 2 What ML? Explain Relation of ML, AI and DL.

2 (A) Answer the following: 4

- 1 Full Form: SVM.
- 2 What is Scaling?
- 3 What is Normalization?
- 4 What is Binarization?

(B) Answer in brief (Any one out of two) 2

- 1 What is Label Encoding?
- 2 What is Mean Removal?

(C) Answer in detail (Any out of two) 3

1 Explain Linear Regression.  
2 Explain Simple Classifier.

(D) Write a note on (Any one out of two)

1 Write Code to demonstrate Normalization.  
2 Write code to demonstrate Binarization.

5

3 (A) Answer the following:

1 Full Form: KNN.  
2 What is Neural Network?  
3 Full Form: SVD.  
4 What is Buffer?

4

(B) Answer in brief (Any one out of two)

1 Explain vector quantization.  
2 Explain mean shift clustering.

2

(C) Answer in detail (Any one out of two)

1 What is agglomerative clustering.  
2 Explain k-means clustering.

3

(D) Write a note on ( Any one out of two)

1 Write code to demonstrate Agglomerative Clustering.  
2 Write code to demonstrate K means clustering.

5

4 (A) Answer the following:

1 Full Form: NLP.  
2 Describe Information Extraction.  
3 What is Language Generation?  
4 What is Speech Processing?

4

(B) Answer in brief (Any one out of two)

1 What are the applications of NLP?  
2 Difference between ML and NLP.

2

(C) Answer in detail (Any one out of two)

1 Explain stemming data.  
2 Explain NLP In Detail.

3

(D) Write a note on (Any one out of two)

1 Write code to demonstrate Implementation Noun-Phrase chunking.

5

2

2 Write code to demonstrate Implementation of Porter Stemmer.

5 (A) Answer the following:

- 1 Full Form: ROI.
- 2 What is OpenCV?
- 3 What is Object Detection?
- 4 What is Haar cascade?

4

(B) Answer In brief (Any one out of two)

- 1 Explain: How to detect a face using OpenCV.
- 2 Explain: How to detect a mouth using OpenCV.

2

(C) Answer in detail (Any one out of two)

- 1 Explain: How to detect eyes using OpenCV.
- 2 Explain: How to detect pupils using OpenCV.

3

(D) Write a note on (Any one out of two)

- 1 Write code to demonstrate Blur Image using OpenCV.
- 2 Write code to demonstrate Play video using OpenCV.

5

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