

BACHELOR OF SCIENCE (INFO. & TECH.) Examination  
BSCIT SEMESTER-6 MARCH 2026 ( NEP ) MARCH - 2026

CS -37 : MACHINE LEARNING WITH PYTHON

Faculty Code : 03

Subject Code : 23SI-BSIT-MA-06-16001

Time : 2 Hours]

[Total Marks : 50

- Q.1 (A) Attempt the following. 3
- (1) Full Form: DL.
  - (2) Full Form: AI.
  - (3) Full Form: ML
- Q.1 (B) Attempt any one of the following. 2
- (1) Difference between Supervised & Unsupervised Learning.
  - (2) Explain Machine Learning.
- Q.1 (C) Attempt any one of the following. 5
- (1) What ML? Explain Relation of ML, AI and DL.
  - (2) Explain How Machines Learn.
- Q.2 (A) Attempt the following. 3
- (1) What is Normalization?
  - (2) Full Form: SVM.
  - (3) What is Scaling?
- Q.2 (B) Attempt any one of the following. 2
- (1) What is Mean Removal?
  - (2) What is Label Encoding?
- Q.2 (C) Attempt any one of the following. 5
- (1) Write code to demonstrate Binarization.
  - (2) Write Code to demonstrate Normalization.
- Q.3 (A) Attempt the following. 3
- (1) What is Neural Network?
  - (2) Full Form: SVD.
  - (3) Full Form: KNN.
- Q.3 (B) Attempt any one of the following. 2
- (1) Explain mean shift clustering.
  - (2) Explain vector quantization

- Q.3 (C) Attempt any one of the following. 5
- (1) Write code to demonstrate K means clustering.
  - (2) Write code to demonstrate Agglomerative Clustering.
- Q.4 (A) Attempt the following. 3
- (1) Describe Information Extraction.
  - (2) What is Language Generation?
  - (3) Full Form: NLP
- Q.4 (B) Attempt any one of the following. 2
- (1) Difference between ML and NLP.
  - (2) What are the applications of NLP?
- Q.4 (C) Attempt any one of the following. 5
- (1) Write code to demonstrate Implementation of Porter Stemmer.
  - (2) Write code to demonstrate Implementation Noun-Phrase chunking.
- Q.5 (A) Attempt the following. 3
- (1) What is Object Detection?
  - (2) Full Form: ROI
  - (3) What is OpenCV?
- Q.5 (B) Attempt any one of the following. 2
- (1) Explain: How to detect a mouth using OpenCV
  - (1) Explain: How to detect a face using OpenCV.
- Q.5 (C) Attempt any one of the following. 5
- (1) Write code to demonstrate Play video using OpenCV.
  - (2) Write code to demonstrate Blur Image using OpenCV.

... END OF EXAM ...