

Course Code: 23MC3T10  
**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY &  
 SCIENCE(AUTONOMOUS)**

*II –MCA III-Semester Regular Examinations (BR23), December - 2024*  
**SUBJECT NAME: MACHINE LEARNING WITH PYTHON (BRANCH): MCA**  
 Time: 3 hours Max. Marks: 70

*Answer any Five Questions One Question for One UNIT*  
**ALL the Question Carry Equal Marks**

UNIT-I		Marks	CO	BL
1.a)	Discuss about installing scikit-learn	7M	Co1	2
b)	Discuss any four examples of machine learning applications	7M	Co1	2
<b>OR</b>				
2.a)	Discuss about logical models and concept learning	7M	Co1	2
b)	Discuss about matplotlib with example	7M	Co1	2

UNIT-II		Marks	CO	BL
3.a)	Define gain and entropy? How it is used to build the decision tree.	7M	Co2	1
b)	Explain k-nearest neighbour algorithm with example.	7M	C02	3
<b>OR</b>				
4.a)	Explain regression with example	7M	Co2	3
b)	Discuss about ability of classifier to provide Uncertainty Estimates of prediction	7M	C02	2

UNIT-III		Marks	CO	BL
5.a)	Explain how to deal with missing data.	7M	C03	2
b)	Compare the terms Feature Selection, Feature Extraction and Feature engineering with suitable example.	7M	C03	5
<b>OR</b>				
6.a)	Discuss the need for dimensionality reduction and explain the one dimensionality Reduction Model with a case study.	7M	Co3	2
b)	Explain the types of data with examples.	7M	Co3	2

UNIT-IV		Marks	CO	BL
7.a)	Discuss the hyper parameter tuning methods with example.	7M	C04	2
b)	Demonstrate the k-fold cross-validation with an example program.	7M	Co4	3
<b>OR</b>				
8.a)	Discuss the implementation issues of bagging models with a python program	7M	C04	2
b)	discuss about diagnosing bias and variance problems	7M	Co4	2

UNIT-V		Marks	CO	BL
9.a)	Discuss about stop words	7M	C05	2
b)	Explain about stemming and lemmatization	7M	Co5	3
<b>OR</b>				
10.a)	Discuss about probabilistic Modeling	7M	C05	2
b)	Illustrate investigating model coefficients.	7M	Co6	4

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**Bonam Venkata Chalamayya Institute of Technology &  
Science  
(Autonomous)**

**Department of Computer Applications**

Course: MACHINE LEARNING WITH PYTHON (23MC3T10) Year / Semester: II / I

Branch: MCA

Faculty: Mrs. P B L Aparna

Academic Year: 2024-2025

Course outcomes:

At the end of the course, student will be able to:

C211.1: Discuss the fundamentals of machine learning with python.(**UNDERSTAND**)


C211.2: Apply supervised Learning algorithms to classify data.(**APPLY**)

C211.3: Apply pre processing techniques on data set. (**APPLY**)

C211.4: Analyse performance of a given model.(**ANALYZE**)

C211.5: Discuss ensemble learning models and sentiment analysis  
.(**UNDERSTAND**)

  
FACULTY

  
HOD