Malla Reddy Engineering College (Autonomous)

Maisammaguda, Dhulapally (Post via Kompally), Secunderabad – 500 100.

III B.TECH - II Semester (MR17) I MID EXAMNATIONS

Subject: **Machine Learning**

Branch: **III CSE**

Time Duration: 90 Minutes

Instructions:

1. **All the questions carry equal marks**
2. **Answer all the questions**

MODULE I			
Q.No.	**Question**	**Bloom's Taxonomy Level**	**CO**
1.	Explain in detail about machine learning with suitable examples.	**[Understanding]**	1
	OR		
2.	Demonstrate how machine learning can be used to solve the classical problems.	**[Understanding]**	1
3.	Build a consistent hypothesis set by applying Candidate Elimination algorithm on a sample dataset.	**[Applying]**	1
	OR		
4.	Make use of List-Then-Eliminate Algorithm to generate consistent hypothesis.	**[Applying]**	1
5.	Illustrate the applications of Machine Learning.	**[Understanding]**	1
	OR		
6.	Explain how to design a learning system for checkers problem.	**[Understanding]**	1
7.	Interpret the effect of inductive bias and unbiased learning in development of machine learning models.	**[Understanding]**	1
	OR		
8.	Infer the remarks on Version Spaces and candidate elimination algorithms.	**[Understanding]**	1

MODULE II			
Q.No.	**Question**	**Bloom's Taxonomy Level**	**CO**
1.	Explain in detail about appropriate problems for decision tree learning.	**[Understanding]**	2
	OR		

2.	Demonstrate the representation of decision trees with suitable examples.	**[Understanding]**	2
3.	Apply ID3 algorithm on a sample dataset to construct a decision tree.	**[Applying]**	2
	OR		
4.	Make use of entropy and information gain and illustrate how these measures are used in decision tree construction.	**[Applying]**	2
	OR		
5.	Illustrate the concept of Perceptron in Neural Network learning.	**[Understanding]**	2
6.	Demonstrate how hypotheses of machine learning models can be tested.	**[Understanding]**	2
	OR		
7.	Explain in detail about Back Propagation algorithm	**[Understanding]**	2
	OR		
8.	Summarize the concept of error estimation and binomial distribution.	**[Understanding]**	2

MODULE III			
Q.No.	**Question**	**Bloom's Taxonomy Level**	**CO**
1	Illustrate brute force Bayes Concept learning.	**[Understanding]**	3
	OR		
2	Explain about Minimum Description Length principle.	**[Understanding]**	3
3	Infer about Maximum Likelihood and least squared error hypothesis.	**[Understanding]**	3
	OR		
4	Demonstrate the process of gradient search to maximize likelihood in a Neural Net.	**[Understanding]**	3