

## UNIT-I

1. Define the learning rate
2. Summarize reinforcement learning
3. Define machine learning.
4. What is Supervised and Unsupervised Learning
5. Define hebb's rule

6. What is hypothesis

7. What is Version space and Explain candidate Elimination Algorithm

Example	Sky	AirTemp	Humidity	Wind	Water	Forecast	EnjoySport
1	Sunny	Warm	Normal	Strong	Warm	Same	Yes
2	Sunny	Warm	High	Strong	Warm	Same	Yes
3	Rainy	Cold	High	Strong	Warm	Change	No
4	Sunny	Warm	High	Strong	Cool	Change	Yes

8. Explain in Briefly Types of Machine Learning?

9. Discuss Briefly about finding a maximally specific Hypothesis with the below dataset

Example	Sky	AirTemp	Humidity	Wind	Water	Forecast	EnjoySport
1	Sunny	Warm	Normal	Strong	Warm	Same	Yes
2	Sunny	Warm	High	Strong	Warm	Same	Yes
3	Rainy	Cold	High	Strong	Warm	Change	No
4	Sunny	Warm	High	Strong	Cool	Change	Yes

10. What are the steps involved in designing a learning system in Detail?

11. Explain about the brain and the neuron

12. What are perspectives and issues in ML

13. Explain about concept learning task and search

UNIT-II

10. What is Multilayer perceptron
2. Give the expression for error in back propagation
3. Gaussian function for SoftMax function
4. Define perceptron?
5. Summarize RBF networks
6. What is Curse of Dimensionality
7. Discuss about Multilayer Perceptron Algorithm
8. Explain about Support vector with examples.
9. Derive Back propagation algorithm
10. Explain about MLP and its examples in detail?
11. Explain radial basis functions and splines

### UNIT-III

1. Define Decision tree
2. Define Classification And Regression

3. Define Classification

4. Define Decision tree and what are the steps involved in Constructing Decision tree

5. Explain about Classification And Regression Trees(CART). Draw the decision tree with the below dataset

Deadline?	Is there a party?	Lazy?	Activity
Urgent	Yes	Yes	Party
Urgent	No	Yes	Study
Near	Yes	Yes	Party
None	Yes	No	Party
None	No	Yes	Pub
None	Yes	No	Party
Near	No	No	Study
Near	No	Yes	TV
Near	Yes	Yes	Party
Urgent	No	No	Study