1. Among the following option identify the one which is not a type of learning

## Semi unsupervised learning

Supervised learning

Reinforcement learning

Unsupervised learning

## **Correct Answer**

Answer - A) Semi unsupervised learning is incorrect.

2. Identify the kind of learning algorithm for "facial identities for facial expressions". Prediction

## Recognition patterns

Recognizing anomalies

Generating patterns

Hide

### **Correct Answer**

Answer - B) For facial identities and facial expression, "recognition patterns" is used.

3. Identify the model which is trained with data in only a single batch.

Offline learning

Batch learning

#### Both A and B

None

Hide

### **Correct Answer**

**Answer -** C) The model is trained with data in only a single batch. is known as batch learning or offline learning.

4. What is the application of machine learning methods to a large database called? Big data computing

Internet of things

## Data mining

Artificial intelligence

Hide

#### **Correct Answer**

**Answer** - C) Application of machine learning methods to large databases is known as data mining.

5. Identify the type of learning in which labeled training data is used.

Semi unsupervised learning

## Supervised learning

Reinforcement learning

Unsupervised learning

Hide

### **Correct Answer**

**Answer -** B) Supervised learning uses labeled training data.

6. Identify whether true or false: In PCA the number of input dimensions is equal to principal components.

## True

False

Hide

## **Correct Answer**

**Answer -** A) True. In PCA the number of input dimensions is equal to principal components.

7. Among the following identify the one in which dimensionality reduction reduces.

Performance

Entropy

**Stochastics** 

## Collinearity

Hide

## **Wrong Answer**

**Answer -** D) Dimensionality reduction reduces collinearity.

8. Which of the following machine learning algorithm is based upon the idea of bagging?

Decision tree

### Random-forest

Classification

Regression

Hide

## **Correct Answer**

**Answer -** B) Random forest is based on the idea of bagging.

9. Choose a disadvantage of decision trees among the following.

Decision trees are robust to outliers

Factor analysis

## Decision trees are prone to overfit

All of the above

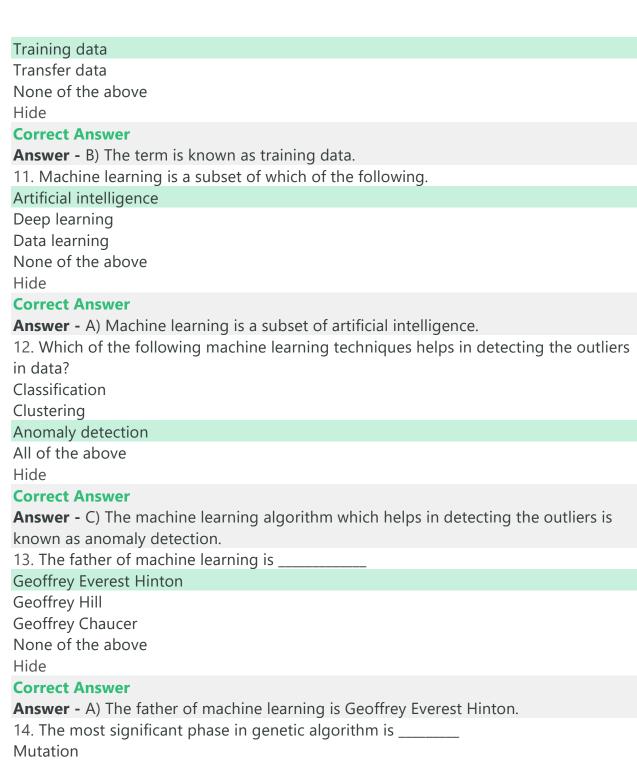
Hide

## **Correct Answer**

**Answer -** C) Decision trees are prone to overfitting.

10. What is the term known as on which the machine learning algorithms build a model based on sample data?

Data training



Selection

Fitness function

Crossover

Hide

#### **Correct Answer**

**Answer -** D) Crossover is the most significant figure in genetic algorithm

15. Which of the following are common classes of problems in machine learning?

Regression

Classification

Clustering

## All of the above

Hide

#### **Correct Answer**

**Answer -** D) All of the above are common classes of problems in machine learning.

16. Among the following options identify the one which is false regarding regression.

It is used for the prediction

It is used for interpretation

It relates inputs to outputs

## It discovers casual relationships

Hide

#### **Correct Answer**

**Answer -** D) Option d is incorrect among the following.

17. Identify the successful applications of ML.

Learning to classify new astronomical structures

Learning to recognize spoken words

Learning to drive an autonomous vehicle

#### All of the above

Hide

#### **Correct Answer**

**Answer -** D) All of the above are applications of ML.

18. Identify the incorrect numerical functions in the various function representation of machine learning.

## Case-based

Support vector machines

Linear regression

Neural network

Hide

#### **Correct Answer**

**Answer -** A) Case-based is the correct answer

19. FIND-S algorithm ignores?

Positive

## Negative

Both

None

Hide

#### **Correct Answer**

**Answer -** B) FIND-S algorithm ignores negative.

20. Select the correct definition of neuro software.

It is software used by neurosurgeons

It is software used to analyze neurons

It is a powerful and easy neural network

None of the above

Hide

### **Correct Answer**

**Answer -** C) Neuro software is a powerful and easy neural network.

21. Choose whether the following statement is true or false: The backpropagation law is also known as the generalized Delta rule.

## True

False

Hide

#### **Correct Answer**

**Answer -** A) True. The backpropagation law is also known as the generalized Delta rule.

22. Choose the general limitations of the backpropagation rule among the following. Slow convergence

Scaling

Local minima problem

#### All of the above

Hide

### **Correct Answer**

**Answer -** D) All of the above general limitations of the backpropagation rule.

23. Analysis of ML algorithm needs

Statistical learning theory

Computational learning theory

#### Both A and B

None of the above

Hide

#### **Correct Answer**

**Answer -** C) Analysis of ML algorithms needs both statistical learning theory and computational learning theory.

24. Choose the most widely used mattress and tools to assess the classification models.

The area under the ROC curve

Confusion matrix

Cost-sensitive accuracy

All of the above

#### Hide

#### **Correct Answer**

Answer - D) All of the above are correct.

25. Full form of PAC is \_\_\_\_\_

**Probably Approx Cost** 

## **Probably Approximate Correct**

**Probability Approx Communication** 

**Probably Approximate Computation** 

Hide

#### **Correct Answer**

**Answer -** B) PAC stands for Probably Approximate Correct.

26. Choose that following statement is true or false: True error is defined over the entire instance space, and not just over training data

### True

False

Hide

#### **Correct Answer**

Answer - A) True. the above statement is correct.

27. Choose the options below of which the area CLT is comprised of.

Mistake bound

Sample complexity

Computational complexity

### All of the above

Hide

### **Correct Answer**

Answer - D) The area CLT is comprised of all of the above.

28. Choose the instance-based learner.

Eager learner

## Lazy learner

Both A and B are correct

None of the above

Hide

#### **Correct Answer**

**Answer -** B) Lazy learner is an instance-based learner.

29. Identify the difficulties with the k-nearest neighbor algorithm.

Curse of dimensionality

Calculate the distance of the test case from all training cases

#### Both A and B

None of the above

Hide

#### **Correct Answer**

Answer - C) Both A and B are correct.

30. The total types of the layer in radial basis function neural networks is \_\_\_\_\_

1

2

3

4

Hide

#### **Correct Answer**

**Answer -** C) There is a total of 3 types of layered in radial basis function neural networks.

31. Which of the following is an application of CBR?

Diagnosis

## Design

Planning

All of the above

Hide

#### **Correct Answer**

**Answer -** B) Design is an application of CBR.

32. Choose the correct advantages of CBR.

Fast to train

A local approx is found for each test case

Knowledge is in a form understandable by human

### All of the above

Hide

#### **Correct Answer**

**Answer -** D) All of the above advantages of CBR.

33. Machine learning as various Search and Optimisation algorithms. Identify among the following which is not evolutionary computation.

Genetic algorithm

Genetic programming

Neuroevolution

#### Perceptron

Hide

## **Correct Answer**

**Answer -** D) Perceptron is not evolutionary computing.

34. Choose whether the following statement is true or false: Artificial intelligence is the process that allows a computer to learn and make decisions like humans.

#### True

False

#### Hide

#### **Correct Answer**

Answer - A) The above statement is true.

35. Which of the following is not machine learning disciplines?

Information theory

Optimisation + control

**Physics** 

## Neuro statistics

Hide

#### **Correct Answer**

Answer - D) Neuro statistics is not a message landing discipline

36. What does K stand for in K mean algorithm?

Number of clusters

Number of data

Number of attributes

#### Number of iterations

Hide

#### **Correct Answer**

**Answer -** D) K stands for a number of iterations in the K mean algorithm.

37. Choose whether true or false: Decision tree cannot be used for clustering

True

## False

Hide

## **Correct Answer**

**Answer -** B) False. A decision tree can be used for clustering.

38. Identify the clustering method which takes care of variance in data

Decision tree

## Gaussian mixture model

K means

All of the above

Hide

#### **Correct Answer**

Answer - B) Gaussian mixture model takes care of variance in data

39. Which of the following is not a supervised learning

#### PCA

Naive Bayesian

Linear regression

Decision tree

Hide

#### **Correct Answer**

**Answer -** A) PCA Is not supervised learning.

40. What is unsupervised learning?

Number of groups may be known

Features of group explicitly stated

Neither feature nor number of groups is known

None of the above

Hide

### **Correct Answer**

**Answer -** C) Unsupervised learning has neither feature nor number of groups known.

41. Which of the following is not a machine learning algorithm?

SVM

SVG

Random forest

None of the above

Hide

#### **Correct Answer**

**Answer -** B) SVG Is not a machine learning algorithm.

42. What is true about Machine Learning?

The main focus of ML is to allow computer systems to learn from experience without being explicitly programmed or human intervention.

ML is a type of artificial intelligence that extracts patterns out of raw data by using an algorithm or method.

Machine Learning (ML) is the field of computer science.

All of the above

Hide

#### **Correct Answer**

**Answer -** D) All of the above is true about machine learning.

43. Which of the following is not machine learning?

Artificial intelligence

Rule-based inference

Both A and B

None of the above

Hide

#### **Correct Answer**

Answer - B) Rule-based inference is not machine learning

44. Identify the method which is used for trainControl resampling.

svm

#### repeatedcv

Bag32

None of the above

## Hide

# **Correct Answer**

**Answer -** B) repeatedcv is used for trainControl resampling.

45. Among the following option identify the one which is used to create the most common graph types.

plot quickplot qplot All of the above Check Answer