FLIP ROBO TECHNOLOGIES

MCQ(ques on and their answer)

NAME = MANOJ SINGODIYA

BATCH = DS2308

51) What is unsupervised learning?

a) Number of groups may be known

b) Features of groups explicitly stated

c) Neither feature nor number of groups is known

d) None of the above

Answer 51: d) None of the above

52) Which of the following is not a machine learning algorithm?

a) SVM

b) SVG

c) Random Forest Algorithm

d) None of the above

Answer 52: b) SVG

53) _____ is the scenario when the model fails to decipher the underlying trend in the input data a) Overfi ng

b) Underfi ng

c) Both a and b

d) None of the above

Answer 53: b) Underfi ng

54) Real-Time decisions, Game AI, Learning Tasks, Skill acquisi on, and Robot Naviga on are applica ons of .....

a) Reinforcement learning

b) Supervised learning

c) Unsupervised Learning

d) None of the above

Answer 54: d) None of the above

55) What is called the average squared difference between classifier predicted output and actual output?

a) Mean rela ve error

b) Mean squared error

c) Mean absolute error

d) Root mean squared error

Answer 55: b) Mean squared error

56) Logis c regression is a ..... regression technique that is used to model data having a ..... outcome.

a) Linear, binary

b) Linear, numeric

c) Nonlinear, binary

d) Nonlinear, numeric

Answer 56: d) Nonlinear, numeric

57) You are given reviews of few ne lix series marked as posi ve, nega ve and neutral. Classifying reviews of a new ne lix series is an example of

A. supervised learning

B. unsupervised learning

C. semisupervised learning

D. reinforcement learning

Answer 57: A. supervised learning

58) Following is powerful distance metrics used by Geometric model

A. euclidean distance

B. manha an distance

C. both a and b

D. square distance

Answer 58: C. both a and b

59) Which of the following techniques would perform be er for reducing dimensions of a data set?

A. removing columns which have too many missing values

B. removing columns which have high variance in data

C. removing columns with dissimilar data trends

D. none of these

Answer 59: D. none of these

60) Supervised learning and unsupervised clustering both require which is correct according to the statement.

A. output a ribute. B.

hidden a ribute.

C. input a ribute.

D. categorical a ribute

Answer 60: B. hidden a ribute.

61) What is the meaning of hard margin in SVM?

(A) SVM allows very low error in classifica on

(B) SVM allows high amount of error in classifica on

(C) Underfi ng

(D) SVM is highly flexible

Answer 61: (B) SVM allows high amount of error in classifica on

62) Increase in which of the following hyper parameter results into overfit in Random forest? (1). Number of Trees. (2). Depth of Tree, (3). Learning Rate (

A) Only 1

(B) Only 2

(C) 2 and 3

(D) 1,2 and 3

Answer 62: (B) Only 2

63) Below are the 8 actual values of target variable in the train file: [0,0,0, 0, 1, 1,1,1,1,1], What is the entropy of the target variable?

(A) -(6/10 log(6/10) + 4/10 log(4/10))

(B) 6/10 log(6/10) + 4/10 log(4/10)

(C) 4/10 log(6/10) + 6/10 log(4/10)

(D) 6/10 log(4/10) – 4/10 log(6/10)

Answer 63: (A) -(6/10 log(6/10) + 4/10 log(4/10))

64) Lasso can be interpreted as least-squares linear regression where

(A) weights are regularized with the l1 norm

(B) weights are regularized with the l2 norm

(C) the solu on algorithm is simpler

Answer 64: (A) weights are regularized with the l1 norm

65) Consider the problem of binary classifica on. Assume I trained a model on a linearly separable training set, and now I have a new labeled data point that the model properly categorized and is far away from the decision border. In which instances is the learnt decision boundary likely to change if I now add this addi onal point to my previous training set and re-train? When the training model is,

(A) Perceptron and logis c regression

(B) Logis c regression and Gaussian discriminant analysis

(C) Support vector machine

(D) Perceptron

Answer 65: (B) Logis c regression and Gaussian discriminant analysis

66) Assume you've discovered mul -collinear features. Which of the following ac ons do you intend to take next? (1). Both collinear variables should be removed. (2). Instead of dele ng both variables, we can simply delete one. (3). Removing correlated variables may result in informa on loss. We may u lize penalized regression models such as ridge or lasso regression to keep such variables. (A) Only 1

(B) Only 2

(C) Either 1 or 3

(D) Either 2 or 3

Answer 66: (D) Either 2 or 3

67) A least squares regression study of weight (y) and height (x) yielded the following least squares line: $y = 120 + 5x$. This means that if the height is increased by one inch, the weight should increase by what amount?

(A) increase by 1 pound

(B) increase by 5 pound

(C) increase by 125 pound

(D) None of the above

Answer 67: (B) increase by 5 pound

68) The line described by the linear regression equa on (OLS) a empts to ____?

(A) Pass through as many points as possible.

(B) Pass through as few points as possible

(C) Minimize the number of points it touches

(D) Minimize the squared distance from the points

Answer 68: (D) Minimize the squared distance from the points

69) For two real-valued a ributes, the correla on coefficient is 0.85. What does this value indicate?

(A) The a ributes are not linearly related

(B) As the value of one a ribute increases the value of the second a ribute also increases

(C) As the value of one a ribute decreases the value of the second a ribute increases

(D) The a ributes show a curvilinear rela onship

Answer 69: (C) As the value of one a ribute decreases the value of the second a ribute increases

70) Which neural network architecture would be most suited to handle an image iden fica on problem (recognizing a dog in a photo)?

(A) Mul Layer Perceptron

(B) Convolu onal Neural Network

(C) Recurrent Neural network

(D) Perceptron.

Answer 70: (B) Convolu onal Neural Network