Final Exam

LATEST SUBMISSION GRADE

100%

1.
Question 1
Which of the following is true about Machine Learning?

1 / 1 point

Machine Learning models help us in tasks such as object recognition, summarization, and recommendation.

Machine Learning models iteratively learn from data and allow computers to find hidden insights.

Machine Learning was inspired by the learning process of human beings.

All of the above.

Correct

2.
Question 2
Which of the following is a Machine Learning technique?

1 / 1 point

Clustering

Classification

Regression/Estimation

Associations

All of the above

Correct

3.
Question 3
Multiple Linear Regression is appropriate for:

1 / 1 point

Predicting whether a drug is effective for a patient based on her characteristics

Predicting tomorrow's rainfall amount based on the wind speed and temperature

Predicting the sales amount based on month

Correct

4.
Question 4
Which of the following statements are **TRUE** about **Polynomial Regression**?

1 / 1 point

Polynomial regression models can fit using the Least Squares method.

Correct

Polynomial regression fits a curve line to your data.

Correct

Polynomial regression can use the same mechanism as Multiple Linear Regression to find the parameters.

Correct

5.
Question 5
Which one **IS NOT** a sample of classification problem?

1 / 1 point

To predict whether a customer switches to another provider/brand.

To predict the category to which a customer belongs to.

To predict the amount of money a customer will spend in one year.

To predict whether a customer responds to a particular advertising campaign or not.

Correct

6.
Question 6
Which of the following statements are **TRUE** about Logistic Regression? (select all that apply)

1 / 1 point

Logistic regression can be used both for binary classification and multi-class classification

Correct

Logistic regression is analogous to linear regression but takes a categorical/discrete target field instead of a numeric one.

Correct

In logistic regression, the dependent variable is binary.

Correct

7.
Question 7
Which statement is **NOT TRUE** about k-means clustering?

1 / 1 point

As k-means is an iterative algorithm, it guarantees that it will always converge to the global optimum.

k-means divides the data into non-overlapping clusters without any cluster-internal structure.

The objective of k-means, is to form clusters in such a way that similar samples go into a cluster, and dissimilar samples fall into different clusters.

Correct

8.
Question 8
Which of the following are characteristics of DBSCAN? Select all that apply.

1 / 1 point

☑ DBSCAN can find arbitrarily shaped clusters.

Correct

☑ DBSCAN can find a cluster completely surrounded by a different cluster.

Correct

☑ DBSCAN has a notion of noise, and is robust to outliers.

Correct

☑ DBSCAN does not require one to specify the number of clusters such as k in k-means

Correct

9.
Question 9
A _____ system provides a better experience for the user by giving them a broader exposure to many different products they might be interested in.

1 / 1 point

○ Resource

○ Reinforcement

◉ Recommender

○ Relationship

Correct

10.

Question 10

The statement “Show me more of the same of what I’ve liked before” is an example of what type of recommendation system?

1 / 1 point

Utility-based

Collaborative

Demographic-based

Content-based

Correct