

MACHINE LEARNING

ANSWERS: -

- 1- A
- 2- A
- 3- B
- 4- C
- 5- C
- 6- B
- 7- D
- 8- D
- 9- A
- 10- A
- 11- A
- 12- D
- 13- Regularization is one of the most important concepts of machine learning. It is a technique to prevent the model from overfitting by adding extra information to it.
- 14- Lasso, Ridge and Elastic are particular algorithms used for regularization.
- 15- Error term essentially means that the model is not completely accurate and results in differing results during real-world applications.

PYTHON WORKSHEET 1

ANSWERS: -

- 1- C
- 2- B
- 3- C
- 4- A
- 5- C
- 6- B
- 7- A
- 8- C
- 9- A AND C
- 10- A AND B

STATISTICS

ANSWERS: -

- 1- A
- 2- A
- 3- A
- 4- C
- 5- C
- 6- B

7- B

8- A

9- C

10- Normal distribution, also known as the Gaussian distribution, is a symmetric probability distribution that is centred around the mean. It shows that data near the mean are more frequent in occurrence than data far from the mean. In graphical form, the normal distribution appears as a "bell curve"

11- Data Dropping Using the `dropna()` function is the easiest way to remove observations or features with missing values from the dataframe. Below are some techniques.

Mean/Median Imputation These replacement strategies are self-explanatory. ...

Random Sample Imputation The idea behind the random sample imputation is different from the previous ones and involves additional steps.

Multiple Imputation

12 – A/B testing, also known as split testing, is a form of experimentation that compares two or more different versions of something to determine which one performs better. It is commonly used in marketing to test the effectiveness of different variables such as emails, web pages, product designs, and apps.

13 – Imputing the mean is an acceptable practice for missing data imputation. It preserves the mean of the observed data and keeps the sample size up to the full sample size.

14 - Linear regression is a statistical method used to model the relationship between a dependent variable (y) and one or more independent variables (x). It estimates the linear relationship between these variables, allowing you to predict the value of the dependent variable based on the independent variable(s).

15 - descriptive and inferential statistics