Machine Learning

1. A
2. A
3. B
4. B
5. C
6. B
7. D
8. A
9. A
10. B
11. B
12. A,B
13. Overfitting can be reduced by regularization. It is a process by which we slightly compensate in training accuracy to increase generalizability.
14. Algorithms used for regularization include Ensembling, Data augmentation, L1, L2, etc.
15. Error in linear regression may relate to lack of perfect goodness fit and uncertainty in our model.

Python

1.C
2.B
3.C
4.A
5.D
6.C
7.A
8.C
9.A
10.D

Statistics

1.A
2.A
3.B
4.D
5.C
6.B
7.B
8.A
9.C
10. Normal distribution or Guassian distribution refers to the distribution where frequency increases from initial till the halfway point and symmetrically decreases from halfway point to the end.

11. Missing data can be handled through various imputation techniques. I would recommend mean imputation (where mean replaces the missing data) or mode imputation (where mode replaces the missing data) or median (where median replaces the missing data).
12. A/B testing refers to the process of testing two variants to assert which of them perform better under the given dataset and/or metric in order to determine the most efficient variant.
13. Mean imputation is a technique where the missing data is replaced by the mean of the data. It is an inefficient method as it can lead to erraneous feature correlation, decrease variance, increase bias, etc.
14. Linear regression is a method in statistics and data science through which a best fit line is produced using the given data.
15. Various branches of statistics are Data collection, Descriptive and inferential statistics, regression, Machine Learning, Hypothesis testing, etc.