

## **MACHINE LEARNING**

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

**Q13 to Q14 are subjective answers type questions, Answers them in their own words briefly**

**13.** What is the importance of clustering?

Ans. Clustering helps in understanding the natural grouping in a dataset. Their purpose is to make sense to partition the data into some group of logical groupings.

**14.** How can I improve my clustering performance?

Ans. clustering performance can easily be improved by applying ICA blind source separation during the graph Laplacian embedding step

## **STATISTICS WORKSHEET-3**

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

**Q10 and Q15 are subjective answer type questions, Answer them in your own words briefly.**

**10. 10. What Is Bayes' Theorem?**

Ans. Bayes' Theorem states that the conditional probability of an event, based on the occurrence of another event, is equal to the likelihood of the second event given the first event multiplied by the probability of the first event.

**11. What is z-score?**

Ans. Z-score indicates how much a given value differs from the standard deviation. The Z-score, or standard score, is the number of standard deviations a given data point lies above or below mean. Standard deviation is essentially a reflection of the amount of variability within a given data set.

**12. 12. What is t-test?**

Ans. The **t test** tells you how significant the differences between group means also tell differences in means could have happened by chance.

**13. 13. What is percentile?**

Ans. A percentile (or a centile) is a measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall.

**14. What is ANOVA?**

Ans. Analysis of variance (ANOVA) is an analysis tool used in statistics that splits an observed aggregate variability found inside a data set into two parts: systematic factors and random factors. An ANOVA test is a way to find out if survey or experiment results are significant. In other words, they help you to figure out if you need to reject the null hypothesis or accept the alternate hypothesis

**15. How can ANOVA help?**

Ans. ANOVA helps you compare how different groups are different from each other and allows us to see if any two groups are statistically similar.