MACHINE LEARNING In Q1 to Q11,

Q1. A

Q2. A

Q3. B

Q4. B

Q5. C

Q6. **B**

Q7. D

Q8. D

Q9. A

Q10 A

Q11 B

Q12 A & B

**Q13.What is Regularization?**

It is a technique for reducing bias or variance in a data. Sometimes the model tends to learn on its own and we have situations of over fitting or under fitting. To resolve these issues we use Regularization technique.

**Q14. Which particular algorithms are used for regularisation?**

There are 3 types of regularisation technique.

**1 Lasso Regression or L1**-It will internally try to remove columns etc which are not contributing to y label. It is handled by alpha parameter.

2. **Ridge Regression or L2**-It will try to reduce the coefficient value. Eg. if 1 value is giving very high positive contribution and another is giving negative coefficient value, Ridge will try to reduce the difference between positive & negative through the alpha parameter.

3. **Elastic net –** This is a combination if L1 & L2

**Q15. Explain the term error present in linear regression equation?**

In linear Regression, Error is the difference between actual & predicted output. Once the data is trained, another set of data is send for testing. The result of this test data is checked with the predicted output. If there is a difference we call it an error.