## **MACHINE LEARNING**

- 1. OPTION D
- 2. OPTION A
- 3. OPTION A
- 4. OPTION B
- 5. OPTION C
- 6. OPTION B
- 7. OPTION D
- 8. OPTION D
- 9. OPTION A
- 10. OPTION B
- 11. OPTION A
- 12. OPTION A AND B
- 13. REGLARIZATION IS A TECHNIQUE USED TO REDUCE OVERFITTING WHERE THE OVERFITTING IN THE MODEL LEADS TO POOR PERFORMANCE. REGULRIZATION HELPS TO CONTROL THE COMPLEXITY OF THE MODEL. THERE ARE TWO METHODS IN REGULARIZATION :1) LASSO REGULARIZATION, 2) RIDGE REGULARIZATION . IT ADDS A PENALTY TERM TO THE LOSS FUNCTION THAT THE MODEL TRIES TO MINIMIZE
- 14. LASSO REGRESSION: IT ADDS A PENALTY TERM WHEN THE MODEL TRIES TO MINIMIZE. THIS IS MAINLY USED FOR FEATURE SELECTION AS IT HAS A POSSIBILTY TO REDUCE THE COEFFICIENTS OF LESS IMPORTANT FEATURES TO ZERO RIDGE REGRESSION:THIS ALSO ACTS THE SAME WAYS AS THE LASSO REGRESSION BUT IT HELPS TO REDUCE THE MULTICOLINEARITY IN THE DATA AND CAN IMPROVE THE STABILITY OF THE MODEL SUPPORT VECTOR MACHINE(SVM):THIS TECHNIQUE HELPS TO CONTROL THE COMPLEXITY OF THE MODEL AND PREVENT OVERFITTING
- 15. THE ERROR TERM IS ALSO KNOW AS RESIDUAL, IT REFERS TO THE DIFFERENCE BETWEEN THE ACTUAL OBSERVED VALUES OF THE DEPENDENT VARIABLE AND THE PREDICTED VALUES OF THE DEPENDENT VARIABLE BASED ON THE REGRESSION EQUATION