Q1. [8] Explain the need of Machine Learning with the help of Knowledge Pyramid [CO1][L2]

Q2. [10] Explain how machine learning can be related with other fields in detail [CO1][L2]

Q3. [7] Briefly explain the different types of Machine Learning with the help of example [CO1][L2]

Q4. [10] Explain the challenges in Machine Learning [CO1][L2]

Q5. [10] Explain the machine learning process with a neat diagram [CO1][L2]

Q6. [10] Discuss the applications of Machine Learning in various sectors [CO1][L2]

Q7. [10] What is data? Explain the different elements of data [CO1][L2]

Q8. [10] Explain the different types of data. Explain big data analytics and its types [CO1][L2]

Q9. [10] Explain the data management steps included in the big data processing [CO1][L2]

Q10. [10] Apply the Min-Max and Z-score normalization on the following dataset: V = {88, 90, 92, 94} [CO2][L3]

Q11. [10] Find the five-point summary of the list: {13, 11, 2, 3, 4, 8, 9} [CO1][L3]

Q12. [10] Explain univariate data analysis and visualization [CO1][L2]

Q13. [10] Find IQR and outliers for the following datasets:

    i) {10, 15, 17, 18, 20, 22, 25, 30, 35, 70}

    ii) {48, 52, 57, 61, 64, 72, 76, 77, 81, 85, 88} [CO2][L3]

Q14. [10] Explain the following:

    i) Central tendency

    ii) Dispersion

    iii) Quartiles and IQR

    iv) Five-point summary and box plots

    v) Shape

    vi) Kurtosis [CO1][L2]