M.Sc. SY (IV Semester) CCS 651 Data Analytics Assignment Questions

- 1. What is data analytics? What are the different types of data analytics?
- 2. What are the key steps in the data analysis process?
- 3. What are structured and unstructured data?
- 4. Why is data cleaning important?
- 5. How do you handle missing values in a dataset?
- 6. What are common data cleaning techniques?
- 7. Explain the concept of data normalization and standardization.
- 8. Why is data visualization important in analytics?
- 9. How would you visualize time-series data?
- 10. What are some common tools used for data analytics?
- 11. How does correlation analysis help in dimensionality reduction techniques like PCA?
- 12. How is regression analysis used in predictive modeling?
- 13. How does statistical clustering (e.g., K-Means) help in unsupervised learning?
- 14. What is autocorrelation, and how does it affect time series forecasting models?
- 15. What is sentiment analysis, and how does it work?
- 16. How network analysis is applied in social media analytics?
- 17. What is the difference between parametric and non-parametric tests?
- 18. How do you identify multicollinearity in a dataset?
- 19. What are common patterns that can be found in datasets?
- 20. How can clustering techniques are used to identify patterns in data?