SHRI RAMSWAROOP MEMORIAL UNIVERSITY
PROBLEM SET – I

Session	: 2025-26(Odd Sem)	Semester	: III
Course	: B.tech	Subject Code	: UCS 3804
Branch	: DS + AI	Subject Name	: Data Analytics & reporting
Group	: ALL	Name of Faculty Member	: Mr. Sukhmander singh, Ms. Deepika
Unit	: I	Topics Covered	: All Topics

1. Define data analytics. Identify how it differs from traditional data processing techniques.
2. Recall how data analytics has transformed business decision-making in recent years. List two real-world examples.
3. Identify the importance of analytics in industries such as healthcare, retail, and finance.
4. List the different types of analytics. Give a brief description and example for each.
5. Tell the historical evolution of analytics. Relate how it progressed from simple statistics to advanced predictive models.
6. Why is there a growing need for business analytics in today's competitive environment?
7. What is big data? Name and describe the 5 Vs of big data with suitable examples.
8. Show how data analytics can help organizations combat fraud and detect anomalies.
9. What are unstructured data? Identify how they are analyzed differently from structured data.
10. Explain how organizations use data analytics to understand social sentiments on platforms like Twitter or Facebook.

Supplementary Questions:

1. Discuss how analytics can convert raw data into actionable insights with the help of a case study.
2. Examine the role of big data in shaping the future of business analytics. What technologies support big data analytics?

TEXTBOOKS:
1. **Data Science and Analytics** by V.K. Jain
2. IBM Courseware

REFERENCE BOOKS:
1. Data Analytics Made Accessible by Anil Maheshwari

(Signature of the Faculty Member with date)   **(Signature of the Dean with date)**