**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**  **L T P C**  **2 1 0 3** |
| **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)** | | | |