

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Code & Name : **23ADO201 – DATA SCIENCE FUNDAMENTALS**

Course Faculty : **Mr.K.Karthikeyan/AP/CSE**

Question Bank

UNIT-I: INTRODUCTION TO DATA SCIENCE

Part A- Two Mark Questions

| PART A | | | | | |
|--------|---|---|------|-----|-----------------------|
| S.No | Questions | M | CO | BL | Industry/Company Name |
| 1 | Define Data Science and list two of its benefits. | 2 | CO-1 | L-1 | Google |
| 2 | What are the key facets of data? | 2 | CO-1 | L-1 | Microsoft |
| 3 | Briefly explain the step "Setting the Research Goal" in the data science process. | 2 | CO-1 | L-2 | IBM |
| 4 | Mention two challenges in data retrieval. | 2 | CO-1 | L-2 | Amazon |
| 5 | Why is data cleansing important in data science? | 2 | CO-1 | L-1 | TCS |
| 6 | What is Exploratory Data Analysis (EDA)? | 2 | CO-1 | L-1 | Infosys |
| 7 | Differentiate between structured and unstructured data. | 2 | CO-1 | L-2 | Wipro |
| 8 | Give two examples of data transformation techniques. | 2 | CO-1 | L-2 | Accenture |
| 9 | What role does domain knowledge play in data science? | 2 | CO-1 | L-2 | Deloitte |
| 10 | List two tools commonly used in the data science process. | 2 | CO-1 | L-1 | Capgemini |

Part B 16 Mark Questions

| PART B | | | | | |
|--------|---|----|------|-----|-----------------------|
| S.No | Questions | M | CO | BL | Industry/Company Name |
| 1 | Explain the Data Science Process with a neat diagram. Discuss each stage in detail with examples. | 16 | CO-1 | L-4 | Google |
| 2 | Describe the challenges involved in data retrieval and integration for a large-scale e-commerce project. Suggest solutions. | 16 | CO-1 | L-5 | Amazon |
| 3 | Illustrate with examples how data cleansing and transformation impact the quality of insights in a healthcare dataset. | 16 | CO-1 | L-4 | IBM |
| 4 | Discuss the role of EDA in business decision-making. Use a case study from retail analytics. | 16 | CO-1 | L-5 | Walmart |