

B A, BSC, BCOM DEGREE END SEMESTER EXAMINATION – MARCH 2026
UGP (HONS.) SEMESTER – 4: – DISCIPLINE SPECIFIC ELECTIVE
COURSE CODE -: 24UCOMDSE241 – BUSINESS INTELLIGENCE AND DATA

VISUALISATION

(For Regular 2024 Admission)

Time: 1.5 Hours

Max. Marks: 50

PART - A

Answer any 5 Questions.

Marks: 2

1. Define perception and interpretation in data visualisation. (U, CO1)
2. State the purpose of data filtering in the data visualisation process. (U, CO1)
3. List two features of interactive graphics in modern data visualisation. (U, CO2)
4. State one practical use of storytelling in business dashboards. (U, CO2)
5. Identify one quantitative data type with an example. (U, CO3)
6. Identify one qualitative data type with an example. (U, CO3)
7. State any two elements of a data narrative. (U, CO5)

(2 x 5 = 10)

PART - B

Answer any 4 Questions.

Marks: 5

8. Explain the importance of data visualization in terms of enhanced understanding, pattern recognition and storytelling. (U, CO1)
9. Explain data reduction and data binning with suitable illustrations (U, CO2)
10. Explain nominal, ordinal, interval and ratio data types with appropriate examples. (U, CO3)
11. Explain the concept of data relationship and describe positive and negative relationships with examples and diagrams. (An, CO2)

- 12. Explain ranking and distribution relationships in data analysis. (U, CO3)
 - 13. Explain the role of data narrative and visualization in communicating insight. (U, CO5)
- (5 x 4 = 20)**

PART - C

Answer any 2 Questions.

Marks: 10

- 14. Explain data filtering in detail and analyze different filtering techniques including row filtering, column filtering, time-based filtering and outlier detection and removal using PowerBI. (An, CO2)
- 15. Explain quantitative and qualitative data types and their sub-types with suitable examples. (An, CO2)
- 16. Analyse the process of building a data-driven story using data narrative, hierarchy and visualisation techniques. (An, CO5)

(10 x 2 = 20)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Marks
CO1	To understand the concept of data visualization	U	1,2,8	9
CO2	To understand the latest trends in data visualization	U	3,4,9,11,14,15	34
CO3	To understand different types of data used in data analytics	U	5,6,10,12	14
CO4	To apply the story telling techniques in data visualization	A		
CO5	To develop data visualization using Power BI	C	7,13,16	17

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;