

| | | | | | | | | | | | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Reg. No. | | | | | | | | | | | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| | |
|---------------------|-------|
| Question Paper Code | 12203 |
|---------------------|-------|

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023

Seventh Semester

Artificial Intelligence and Data Science
20AIEL720 - BUSINESS INTELLIGENCE
(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|------------------------------------------------------|-------------------------------|
| 1. Define CRM. | 2,K2,CO1 |
| 2. What are the steps in Data Cleaning? | 2,K3,CO1 |
| 3. Define simple linear Regression. | 2,K2,CO2 |
| 4. Give the formula for Conditional probability. | 2,K2,CO2 |
| 5. What is Geo-Spatial Visualization? | 2,K2,CO3 |
| 6. What are the special features of Qlikview? | 2,K2,CO3 |
| 7. What are the common pitfalls in dashboard design? | 2,K2,CO4 |
| 8. Define KPI. | 2,K1,CO4 |
| 9. What is clustering? | 2,K1,CO5 |
| 10. What is the use of BI search interface? | 2,K2,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

- | | |
|----------------------------------------------------------------------|-----------|
| 11. a) (i) Explain logical flow of a problem solving process. | 7,K3,CO1 |
| (ii) Describe the structure of DSS with diagram. | 6,K2,CO1 |
| OR | |
| b) How CRM and BI are driving modern marketing? How CRM can use BI? | 13,K2,CO1 |
| 12. a) (i) What is over fitting and list the impact of over fitting? | 7,K3,CO2 |
| (ii) Explain Linear Regression. | 6,K2,CO2 |
| OR | |
| b) Explain the life cycle of data science in detail. | 13,K2,CO2 |
| 13. a) How to create a Scatter or bubble chart in Power BI? | 13,K2,CO3 |

OR

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

12203

- b) (i) Explain data profiling with an example. *7,K3,CO3*
(ii) Describe the ETL process with a neat sketch. *6,K2,CO3*

14. a) (i) Demonstrate the basic use cases for dashboard actions. *7,K3,CO4*
(ii) How to download a report in PDF format? *6,K3,CO4*

OR

- b) Explain how Sales KPI dashboard and CTO dashboard created. *13,K3,CO4*

15. a) Explain how to visualize the data in sales analysis. Illustrate with chart. *13,K3,CO5*

OR

- b) List the advanced visualization tools and its advantages. *13,K3,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Describe the rich report with an example and analyses the report. *15,K3,CO6*

OR

- b) Describe the case study and real world examples of how business intelligence keeps top companies competitive. *15,K3,CO6*