

**MBA 4th Semester Examination, 2025**

**MBA**

*( Business Analytics )*

**PAPER – MBA-401**

*Full Marks : 100*

*Time : 3 hours*

**Answer all questions**

*The figures in the right hand margin indicate marks*

*Candidates are required to give their answers in their own words as far as practicable*

**GROUP—A**

Answer any *eight* questions from the following :

5 × 8

1. Clarify the role of Marketing Analytics in customer segmentation and targeting strategies.

*( Turn Over )*

2. Define and explain the concepts of correlation and regression with examples.
3. Contrast between intuition-based versus analytics-based decision-making in HR functions.
4. Explain the concept of skewness. How does it help to interpret the data in the business context ? 2 + 3
5. Explain the method of drawing a sample considering multistage random Sampling technique. State the situation where multi-stage random sampling is used. 3 + 2
6. What is Data Science ? Explain its components and how it differs from traditional data analysis ? 2 + 3
7. What do you mean by Business Analysis ? How does it differ from Business Intelligence ? 2 + 3

8. Discuss the role of data visualization in business decision-making ?
9. What do you mean by missing data ? Discuss various methods for handling missing data. 1 + 4
10. Why is HR analytics important for modern organizations ?
11. What are the benefits of using predictive analytics in HR decision-making ?
12. What is the purpose of an HR scorecard in HR analytics ?

**GROUP—B**

Answer any *four* questions from the following :

**10 × 4**

13. Critically assess two techniques of HR demand forecasting, highlighting their applicability, benefits, and limitations.

14. (i) Explain how line graphs are useful in analysing time-series business data.

(ii) Explain why correlation does not imply causation. Give an example.  $5 + 5$

15. (i) Explain the concept of probability distribution. How probability distribution is used to decision making processes ?

(ii) Why is the concept of endogeneity handled differently in VAR then in traditional regression ?  $(3 + 3) + 4$

16. What distinguishes prescriptive analytics from descriptive and predictive analytics ? What additional elements or techniques does it incorporate ? Describe a scenario where prescriptive analytics could provide significant value to a business.  $3 + 3 + 4$

17. Evaluate the impact of mobile analytics on understanding consumer behaviour in the retail context. How can retailers leverage mobile data to improve the customer experience and drive sales both online and offline? 5 + 5

18. Discuss, in brief, any five important HR metrics to measure the performance of HR department.

**[ Internal Assessment – 20 Marks ]**

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