43401

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – MBA-2024
Course Name – Analytics for HR, Marketing and Finance
Course Code - MBA40206E
(Semester IV)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Which analytics type answers "What will happen?"

a) Descriptive b) Diagnostic
c) Predictive d) Prescriptive

(ii) Which is NOT a typical HR data source?

a) HRIS b) Performance Management Systems
c) Personal social media posts d) Exit Interview Data

(iii) Which of the following is measured by Offer-to-Joining ratio?

a) Offers vs positions b) % who join after accepting offer
c) Time between offer and joining d) Cost per hire

(iv) What is the impact of Equipment age on productivity?

a) No impact b) Slight impact
c) Significant impact d) Only for new workers

(v) Select the option that measures Source of Hire Effectiveness.

a) Number of hires by source b) Cost per hire by source
c) Performance & retention by source d) Time to fill by source

(vi) Which of the following is a leading indicator in workforce planning?

a) Historical attrition b) Past productivity
c) Forecasted business demand d) Previous year manpower

(vii) An HR manager wants to predict which employees are most likely to resign in the next six months using historical data on absenteeism, performance ratings, and tenure. Which HR decision model is most appropriate?

a) Descriptive decision model b) Diagnostic decision model
c) Predictive decision model d) Prescriptive decision model

(viii) In which case the simulation in finance is mainly used?

a) Predict certainty
b) Handle uncertainty
c) Avoid forecasting
d) Fix prices

(ix) How the demand forecasting in FMCG can help a fim?

a) Fix prices
b) Increase tax
c) Reduce promotion
d) Plan production and distribution

(x) Which of the following is the main objetive to predict churn by Telecom companies?

a) Increase tariffs
b) Retain profitable customers
c) Expand networks
d) Reduce service

(xi) What is the primary limitation of analytics?

a) Eliminates uncertainty
b) Depends on data quality
c) Guarantees accuracy
d) Removes bias

(xii) A fintech credit model in India failed because it ignored informal income data. This reflects which limitation?

a) Model overfitting
b) System error
c) Algorithm bias
d) Data incompleteness

(xiii) Which of the folloing term refers to Bias in analytics?

a) Random errors
b) Model complexity
c) Data volume
d) Systematic unfair outcomes

(xiv) A food-delivery app analyses customer location and spending without explicit consent. Which ethical principle is violated?

a) Accountability
b) Fairness
c) Privacy & informed consent
d) None of these

(xv) Swiggy wants to design personalised offers for late-night users who order infrequently but spend high per order. Which segmentation approach is MOST appropriate?

a) Geographic segmentation
b) Demographic segmentation
c) Behavioural segmentation
d) Psychographic segmentation

Group-B

(Short Answer Type Questions) 3 x 5=15

2. How is multifactor predictive analytics used in analysing UPI transactions? (3)
3. How does predictive analytics support mutual fund portfolio optimisation? (3)
4. What is the role of KPIs in marketing predictive analytics? (3)
5. Analyse the role of Explainable AI in reducing ethical and regulatory risks. (3)
6. How is Excel used for predictive modelling in finance portfolios and market returns? (3)

OR

How does Excel support predictive modelling in operations management? (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Explain the application of analytics in quality control at a paper manufacturing company. (5)
8. Analyse the importance of KPIs and financial data in predictive analytics. (5)
9. Analyse challenges of AI governance in the Indian context. (5)
10. Evaluate attrition modelling techniques used in the Indian BPO sector. (5)
11. Analyse how skill gap analytics supports predictive workforce modelling. (5)
12. Evaluate campaign ROI analytics with reference to Zomato's digital campaigns. (5)

OR

Analyse multifactor predictive marketing analytics with reference to LG. (5)