23PBACT02

Reg. No.

END SEMESTER EXAMINATION NOV/DEC-2023
First Semester
M.B.A

CORE – II QUANTITATIVE TECHNIQUES AND RESEARCH METHODS IN BUSINESS

Time: Three Hours   **Maximum: 75 marks**

SECTION A – (15 x 1 = 15 marks)
ANSWER ALL QUESTIONS

1. In a box, there are 8 orange, 7 white, and 6 blue balls. If a ball is picked up randomly, what is the probability that it is neither orange nor blue?

   A   1/3   B   1/21
   C   2/21   D   5/21

2. An event in the probability that will never be happened is

   A   Unsure event   B   Sure event
   C   Possible event   D   Impossible event

3. The first step of research is

   A   Selecting a problem   B   Searching a problem
   C   Finding a problem   D   Identifying a problem

4. A research intends to explore the result of possible factors for the organization of effective mid-day meal interventions. Which research method will be most appropriate for this study?

   A   Descriptive method   B   Historical method

C Ex-post facto method	D Experimental method

5. The conceptual framework in which the research is carried out is

   A Research hypothesis   B Synopsis of research

   C Research paradigm   D Research design

6. A researcher is interested in studying the prospects of a particular political party in an urban area. So, what tool should he prefer for the study?

   A Rating scale   B Interview

   C Questionnaire   D Schedule

7. The major attribute of correlation analysis is

   A Association among variables   B Difference among variables

   C Regression among variabls   D Variations among variables

8. To test null hypothesis, a researcher uses

   A T test   B ANOVA

   C Chi- square test   D Factor analysis

9. Formulation of Hypothesis may Not be required in

   A Survey method   B Historical studies

   C Experimental studies   D Normative studies

10. When a multivariate statistical techniques is used to predict a dependent variable from several independent variables, the researcher is studying

    A Dependence   B Independence

    C Interdependence   D Segments

11. The mathematical way in which a set of variables can be represented with one equation is

    A Structuralism   B Variate

24. A Multivariate analysis offers a more complete examination of data by looking at all possible independent variables and their relationships to one another. – Comment. Anlayse the classifications of multivariate analysis.

OR

B Examine the application of statistical software for data analysis.

25. A Discuss the chaptering of the market research project report and also explain the different type of research report.

OR

B Explore the role of HR staff in the development and maintenance of ethical business practices in FSN Pvt. Ltd.

C ANOVA   D Synergy

12. The two basic groups of multivariate techniques are

A Dependence and interdependence methods   B Primary and secondary methods

C Simple and complex methods   D Partial and complete methods

13. The list of a special terms and phrases used is given in the form of

A Foot note   B Quotations

C Glossary   D Bibliography

14. The last state of research process is

A Review of literature   B Report writing

C Research design   D Analysis of data

15. A financial report analyzing the performance of a portfolio of stocks over a five-year period, including risk assessment and trend analysis is

A Analytical research report   B Market research report

C Scientific report   D Survey report

SECTION B – (2 x 5 = 10 marks)
ANSWER ANY TWO QUESTIONS

16. Amazon stock price is falling due to the Dow Jones industrial Index falling earlier. – Derive Baye's theorem and explain it.

17. Discuss the methods of primary data collection with the help of suitable examples.

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18. Hypothesis testing is used to assess the plausibility of a hypothesis by using sample data. – Explain the various research methods that can be used to test hypothesis.

19. Describe the multidimensional scaling with its features and examples.

20. Wagemann, J. & Weger, U. (2021). Perceiving the other self: An experimental first-person account of nonverbal social interaction. *The American Journal of Psychology, 134*(4), 441–461. https://doi.org/10.5406/amerjpsyc.134.4.0441.
   Identify the type of referencing style given above and also explain other styles of referencing.

SECTION C – (5 x 10 = 50 marks)
ANSWER ALL QUESTIONS

21. A Probability distribution gives the possibility of each outcome of a random experiment or event. It provides the probabilities of different possible occurrences. – Interpret the Poisson and normal distribution, their applications in business and industrial problems.

OR

B The only true certainty in life is uncertainty. The COVID-19 pandemic has caused the most perfect plans of business leaders and policymakers to fail. Making decision under risk and uncertainty is very tough and the outcome is unpredictable.
   Summarise the process of decision making under risk and uncertainty considering the important factors.

22. A A specialty food group launching a new range of barbecue rubs would like to understand what flavors of rubs are favored by different people. To understand the preferred flavor palette, they conducted the research study by using various methods in supermarkets.
   Recommend the suitable research design to find out the preferred flavor. Justify.

OR

B Mr. Ganesh, a researcher wants to do the quantitative research on employees of a social media marketing company. He assigned a number to every employee in the company database from 1 to 1000, and used a random number generator to select 100 numbers.
   Identify the sampling method followed by Mr. Ganesh and explain its advantages.

23. A Ms. Heera likes to study the number of walk-ins to the riverside restaurant. She predicts that a certain number of people will arrive for lunch five days a week. At the end of the week, she observed that the expected customer walk-in was different from the actual walk-in.
   How will you check the statistical significance between the observed and expected customer walk-in values using Chi – Square test? Explain its assumptions.

OR

B Regression analysis is a powerful statistical method that allows you to examine the relationship between two or more variables of interest. – Discuss Regression analysis and explain why the organisation should use regression analysis.