

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 1360

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Unique Paper Code : 2923060047

Name of the Paper : Research Methodology (DSE)

Name of the Course : **BMS NEP UGCF 2022**

Semester : VI

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. There are **6** questions in all. Each question carries **18** marks.
3. Attempt any **5** questions.
4. Attempt **all** parts of a question together and show your workings clearly as a part of the solution.
5. Use of simple calculator is allowed.

Q1. You are a research consultant in a retail market research agency. Your firm has been assigned a project to study the changing consumer buying behavior in India due to the rapid growth of e-commerce and quick commerce platforms. Issues include preference for doorstep delivery, reduced visits to physical stores, impulse buying through mobile apps, and price comparison habits. Prepare a research proposal to obtain funding for the study. Also mention whether this study should be classified as basic, fundamental, or applied research, with proper justification. 18

Q2. A retail company seeks to understand consumer preferences for eco-friendly products. The marketing team plans to design a questionnaire addressing awareness, purchase behaviour, perceived value, and willingness to pay. Outline the steps in designing the questionnaire. Discuss suitable question formats and measurement scales, and explain how validity and reliability can be ensured. 18

Q3.a) Discuss the application of different scales of measurement in market surveys evaluating digital platforms. Provide examples of nominal, ordinal, interval, and ratio data that might be collected in studies of user experience, technology adoption, and frequency of use. 9

b) "Primary data is often more demanding to collect than secondary data, yet it remains central to original research. Explain the meaning of primary data collection and discuss its importance, methods, and limitations." 9

Q4. Describe how ANOVA is used to test differences in group means. Compare its application with that of the t-test, highlighting situations where ANOVA is more appropriate.

A university compares **average GPA** across three majors (Business, Engineering, Arts). They conducted data analysis using ANOVA. Write appropriate hypothesis and analyze the output.

P.T.O.

Descriptives

Major	N	Mean	Std. Deviation
Business	30	3.1	0.4
Engineering	28	3.4	0.3
Arts	25	3.0	0.5

ANOVA Table

Source	SS	df	MS	F	Sig.
Between Groups	1.25	2	0.62	5.05	0.009
Within Groups	9.80	80	0.12		
Total	11.05	82			

18

Q5. a) A researcher wants to examine whether age group is associated with the choice of streaming platform among 120 respondents. The observed data are given below:

Age Group	Netflix	Amazon Prime	Disney+	Total
18–25	25	15	10	50
26–40	20	15	5	40
41+	10	15	5	30
Total	55	45	20	120

Formulate the null and alternative hypotheses and test whether streaming platform preference is independent of age group at 5% level of significance.

(χ^2 value at 5% level for 4 d.f. = 9.487)

9

b) Research is not merely an academic exercise; it is a practical tool for rational and informed decision-making. Discuss the nature of research and explain how it contributes to effective decision-making in business and social contexts.

9

Q6. Write short notes on any three of the following:

(3X6)

- Type I and Type II error
- Advantages and limitations of Secondary Data
- Importance of literature review in research
- Survey Vs. Observation method of Data Collection