

[This question paper contains 3 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5707  
Unique Paper code : 61011404  
Name of the Paper : Business Research  
Name of the Course : Bachelor of Management Studies (BMS),  
2022 LOCF  
Semester : IV  
Duration : 3 Hours  
Maximum Marks : 75

**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. All questions carry equal marks.
3. The question paper contain 7 questions.
4. Attempt any 5 questions in all.
5. Use of simple calculator is allowed.

Q 1 Indian beauty industry has witnessed significant transformation in consumption patterns. Interestingly, terms like 'organic', 'ethically sourced', 'eco-friendly' and 'vegan' are now associated with beauty products. In this time of 'ethical consumerism', adopting vegan beauty products is a purposive decision that many consumers make to lead a more conscious lifestyle.

The new age customers want to achieve self-care in a sustainable manner to reduce long-term damage from "chemical brands". To help consumers make more informed choices, a number of organizations have introduced vegan certifications for branding and packaging.

A company wants to explore the key factors influencing consumers' purchase of vegan beauty products. Prepare a research proposal for this company clearly stating all the stages of the research process to address the issue.

15

Q 2 (a) Differentiate between Stratified sampling and Cluster sampling.

5

(b) To study the effectiveness of advertising expenditure at different stores of 'Libaas' a designer apparel store, the sales revenue before and after the advertisement campaign at ten different stores were recorded as follows:

**Sales Revenue of Libaas (in Rs lakh)**

Store	1	2	3	4	5	6	7	8	9	10
Before advertising	13	24	22	16	12	15	19	23	14	17
After advertising	19	23	19	12	16	23	24	21	16	21

P.T.O

Using Wilcoxon signed rank test determine whether there is any difference in the sales revenue before and after advertisement. Test at 5% level of significance. 10

Q 3 Eliminating sugar from your diet isn't easy, but according to IMA, reducing sugar intake can have a huge impact on health. Added sugars also lead to health problems such as weight gain, obesity, type 2 diabetes, and heart disease. Reducing sugar from liquid diet can substantially mitigate adverse health conditions. Most people are thus shifting to packaged sugar-free/low-sugar drinks like flavoured sparkling water to replace the sugary colas. Develop a questionnaire to study the consumer perception, buying criteria, buying behaviour and usage of this product. 15

Q 4 (a) Briefly explain the technique of Factor analysis. 5  
 (b) A survey was conducted to find the popularity of the four brands of protein supplements among young people of different age groups. The results of the survey are given below:

Age Group (in years)	Brand A	Brand B	Brand C	Brand D
Less than 15	125	80	60	35
15-20	125	120	90	65
21-25	112	48	52	88

Does the above data provide sufficient evidence to infer that the choice of protein supplement is independent of age? Test at  $\alpha = 0.05$ . 10

Q 5 (a) You are a research consultant with a university offering a number of postgraduate courses like M Com, MCA and MBA. The university had been offering the course through online mode during the severe pandemic situation prevailing till now. With easing of the curbs, the university now plans to conduct all its courses offline, like earlier. But there is some resistance from the side of the students. If you were to conduct a study to evaluate the impact of online vs offline courses on the performance and learning outcomes of students, recommend the appropriate research design for the study and justify your choice. 10

(b) Differentiate between Depth Interview and Focus Groups. 5

Q 6 A training agency conducted a week-long development program in two different organizations, ABC Ltd. and PQR Ltd., to enhance the skills of middle-level managers. The managers from both the organisations appeared for an exam and personal interview at the end of the program. The composite score obtained by each manager belonging to the two organisations are given below: 15

Scores of Managers

Manager	1	2	3	4	5	6	7	8	9	10	11
ABC Ltd.	90	80	65	78	67	92	49	54	72	89	47
PQR Ltd.	75	60	49	56	78	73	84	85	91	94	

Using the Mann Whitney U test find whether the two populations are identical in their response to the development program?

Q 7 Write short notes: (Any 3)

- (a) Projective Techniques
- (b) Syndicated research in India
- (c) Determination of sample size
- (d) Semantic Differential Scale