JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

PGDM / PGDM (M)/PGDM(SM)

THIRD TRIMESTER (Batch 21-23)

END-TERM EXAMINATIONS, APRIL 2022

Set-4

Course Name	Business Research Methods	Course Code	OM 301
Max. Time	**2 hours**	Max. Marks	**40 Marks**

INSTRUCTIONS:

1. Attempt all questions, marks are indicated after each question
2. Attempt question as per sequence & marks correct question number
3. Overall Permissible Plagiarism is 10%,
4. Marks will be deducted if the Plagiarism is above the permissible limit. The Penalty Clause is: 11-20% - Minus 5 Marks, above 20% - Reappear.

1. Digestive Bytes have launched new probiotic products in the digestive remedies category. The management is working to improve consumers' awareness and inclination toward probiotic products by investing in research and development, which will help to propel the digestive treatments market to new heights. They would like to understand the profiles of target participants, price sensitivity, and the desired form and packaging of products like Chewable, Capsules, Liquid/Drinkable, Powder, and Gels, Others (Pills, Tablet and Gummy). Based on the results of the survey, the management has to identify possible advertising techniques/channel strategies for the product.
   a. Outline the research question and objectives for a research project (3)
   b. Determine the relevant variables.   (2)
   c. Frame the suitable hypotheses.   (3)

2. As part of a study to investigate the effects of stubble burning, the following variables were measured at different locations around Haryana and Punjab. Identify and justify your choice of scale on the basis of the following statements. (2*4)
   a. pH level of the soil (to one decimal place, e.g., 6.3)
   b. Crop grown (0=wheat, 1=barley, 2=oats, 3=other)
   c. The amount of stubble (0=light, 1=medium, 2=heavy)
   d. Awareness of the impact of stubble burning on the environment (on a continuous scale of 1 to 5).

3. Under what circumstances would you recommend: (8)
    a. A probability sample?
    b. A non-probability sample?
    c. A stratified sample?
    d. A cluster sample?

4 Use the SPSS dataset for answering the following parts:-
    a. An experimenter performed 15 experiments to test the effectiveness of three types of drugs and noted their efficacy (SPSS data attached).

Drugs	Efficacy
A	700
B	500
A	500
B	500
B	300
A	400
C	800
A	400
C	900
B	300
A	600
C	600
B	300
C	800
B	400

For the following case, the management wants to know whether there is any significant difference in the efficacy of the three drugs tested.

    i.   Frame the suitable hypotheses (2)
    ii.   Justify the test statistic used for testing the hypothesis? (2)
    iii. Interpret the results at a 5% level of significance (4)

    b. The temperature in December in New York is often below 40 degrees Fahrenheit. Not surprisingly, when National Football League is held in December, coffee is a popular item at the concession stand. Data were recorded for the number of coffee cups sold during 50 games in December and the temperature for that day. For the given dataset, are the sales of coffee dependent on temperature, if yes up to what extent?

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