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**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM-SERVICE MANAGEMENT(SM)**

**THIRD TRIMESTER (Batch 2022-24)**

**END TERM EXAMINATION, APRIL 2023**

**Set-I**

|  |  |  |  |
| --- | --- | --- | --- |
| Course Name | **Business Research Methods** | Course Code | **20503** |
| Max. Time | **2 hours** | Max. Marks | **40 MM** |

**INSTRUCTIONS:**

1. Attempt all questions, marks are indicated after each question

2. Attempt questions as per sequence & mention the correct question and subpart number

3 Overall Permissible Plagiarism is 10%. Marks will be deducted if the Plagiarism is above the permissible limit. The Penalty Clause is: 11-20% - Minus 5 Marks, above 20% - Reappear.

**Note: Attempt all questions**

**Q. No. 1** Indicate whether the following measures use a nominal, ordinal, interval, or ratio scale:

a. Prices on the stock market

b. Marital status, classified as “married” or “never married”

c. Whether a respondent has ever been unemployed

d. Professorial rank: assistant professor, associate professor, or professor

e. Course grades: A, B, C, D, or F

f. Blood-alcohol content

g. The color of one’s eyes

h. The size of one’s pupils **(0.5\*8=4 Marks)**

**Q. No. 2** Identify the exploratory research technique procedure that will be used by research firm to gather insights.

a. A product manager suggests development of a non-tobacco cigarette blended from wheat, cocoa, and citrus.

b. A research project has the purpose of evaluating potential brand names for a new insecticide.

c. A manager must determine the best site for a convenience store in an urban area.

d. An advertiser wishes to identify the symbolism associated with cigar smoking. **(4\*2 Marks)**

**Q. No. 3**

a). Evaluate the situation, select appropriate sampling design and defend your answer:

1. A B-school wants to survey students who have been placed in the last month to determine their satisfaction with their teaching and placement activities. **(3 Marks)**
2. A marketing company wants to conduct a survey of housewife to determine their interest in purchasing a new washing powder. The company knows that housewife in certain income brackets may be more likely to purchase the washing powder than others. **(3 Marks)**
3. b) Suppose you are a marketing manager of a newly opened zoo in Delhi city and you want to evaluate the perception of visitors towards your zoo. Design an attitude measurement scale questionnaire for a zoo that wishes to determine who visits the zoo and how they evaluate it.

**(6 Marks)**

**Q. No. 4**

**a.** This problem relates to the taste/quality of food dishes served to twenty-eight customers in the TAJ GROUP Hotel Chain. The customers, who are basically from the higher income group (HIG), were asked to give their opinion about the quality/taste of the four common non-vegetarian dishes served to them. The analysis of the problem gives us the variance between the dependent variable (rating) and the independent variables (non-vegetarian dish).

The following four common dishes served at the above hotel chains restaurant are coded as follows:

CODE DISH NAME

1. CHICKEN PLATTER

2. HONEY CHICKEN

3. CHICKEN SPINACH

4. TANDOORI CHICKEN

In this problem we have considered four different non-vegetarian dishes that are being offered by

TAJ GROUP Hotel Chain. The Hotel group wants to test, which of the above mentioned nonvegetarian dishes is being preferred by their target customers, that is, the HIG customers.

**(6 Marks)**

**Data:**

|  |  |
| --- | --- |
| **Dish type** | **Ratings** |
| 1 | 6 |
| 1 | 7 |
| 1 | 8 |
| 1 | 5 |
| 1 | 9 |
| 1 | 8 |
| 1 | 7 |
| 2 | 8 |
| 2 | 8 |
| 2 | 9 |
| 2 | 8 |
| 2 | 7 |
| 2 | 9 |
| 2 | 8 |
| 3 | 7 |
| 3 | 6 |
| 3 | 6 |
| 3 | 5 |
| 3 | 7 |
| 3 | 7 |
| 3 | 5 |
| 4 | 6 |
| 4 | 6 |
| 4 | 7 |
| 4 | 6 |
| 4 | 8 |
| 4 | 7 |
| 4 | 6 |

**b.** An organization would like to build a regression model consisting of four independent variables to predict the compensation (dependent variable) of its employees. Past data has been collected for 15 different employees, and four independent variables. Build a regression model and recommend its proper usage.

The data is as follows:

Dependent variables

Y = compensation in rupees.

Independent variables

1. Experience (in years)

2. Education (in years, after 10th standard)

3. Number of employees supervised

4. Number of projects handled

The dataset consisting 15 observations, is given in Table **(10 Marks)**

**Data:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **Compensation** | **experience** | **Education** | **Employee** | **Projects** |
| 1 | 1500 | 2 | 1 | 4 | 10 |
| 2 | 1650 | 3 | 12 | 5 | 10 |
| 3 | 1750 | 3 | 5 | 5 | 12 |
| 4 | 1400 | 2 | 2 | 3 | 9 |
| 5 | 2000 | 4 | 12 | 6 | 15 |
| 6 | 2200 | 5 | 3 | 6 | 14 |
| 7 | 2100 | 1 | 5 | 4 | 12 |
| 8 | 2750 | 5 | 7 | 7 | 15 |
| 9 | 2900 | 8 | 4 | 8 | 25 |
| 10 | 1100 | 3 | 1 | 2 | 7 |
| 11 | 1000 | 4 | 4 | 1 | 5 |
| 12 | 1350 | 6 | 2 | 4 | 12 |
| 13 | 1550 | 4 | 7 | 4 | 11 |
| 14 | 1375 | 8 | 10 | 8 | 13 |
| 15 | 1400 | 4 | 15 | 5 | 10 |