****

**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**Reappear Examination PGDM (G, SM & Marketing)**

**THIRD TRIMESTER (Batch 2024-26)**

|  |  |  |  |
| --- | --- | --- | --- |
| 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

**Q.1** **EcoMobility**, a green mobility startup, plans to offer electric bicycle subscriptions in urban areas. They want to study adoption willingness, perceived value, and pricing acceptance. Factors to explore include environment concern, convenience, gender, profession, and age.

a. Suggest the most suitable research design and method. Justify. (2 marks)  
b. Propose two hypotheses. (2 marks)  
c. Who should be the target respondents? Justify. (2 marks)

**Q.2** **Case**: Meal Kits Preference Among Working Couples

A company launching DIY meal kits wants to explore how taste, preparation time, price, freshness, and family size influence usage frequency and satisfaction.

Design a questionnaire for the research question: *How do freshness, prep time, price sensitivity, and family size affect working couples’ satisfaction and frequency of meal kit usage?*  
Justify the measurement scale used. (8 marks)

**Q.3** Explain the following sampling methods with justification: (1.5 × 4 = 6 marks)

a. A telecom firm divides customers by location (rural/urban), then samples proportionally.  
b. Every 15th user review is picked from an e-commerce app to study sentiments.  
c. A digital bank selects 1000 clients randomly to participate in a usability test.  
d. A survey is conducted only with department heads to generalize employee feedback.

**Q.4** **Case (Sales Impact of Store Layout)**: A brand tests sales performance under three layouts: Traditional, Boutique, and Open Concept across 5 stores.

Use SPSS to determine if layout significantly affects sales at 5% significance. If yes, perform post hoc and interpret. (10 marks)

| **Layout** | **Store 1** | **Store 2** | **Store 3** | **Store 4** | **Store 5** |
| --- | --- | --- | --- | --- | --- |
| Traditional | 100 | 110 | 95 | 105 | 98 |
| Boutique | 125 | 130 | 120 | 128 | 132 |
| Open Concept | 115 | 112 | 110 | 117 | 113 |

**Q.5** Below is a dataset of **units sold**, **marketing spend**, and **product price** from 2012–2021:

| **Year** | **Units Sold** | **Ad Spend (₹000)** | **Price (₹)** |
| --- | --- | --- | --- |
| 2012 | 300 | 50 | 20 |
| 2013 | 280 | 45 | 21 |
| 2014 | 320 | 60 | 19 |
| 2015 | 250 | 35 | 22 |
| 2016 | 290 | 55 | 20 |
| 2017 | 330 | 70 | 18 |
| 2018 | 350 | 75 | 17 |
| 2019 | 370 | 80 | 16 |
| 2020 | 260 | 40 | 21 |
| 2021 | 310 | 65 | 18 |

1. Test the effect of **Ad Spend** and **Price** on **Units Sold**. Estimate and interpret R². (5 marks)
2. Derive the regression equation. (2 marks)
3. Estimate expected sales if Ad Spend = ₹85,000 and Price = ₹15. (3 marks)