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**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM (D)**

**Third TRIMESTER (Batch 2023-2025)**

**END-TERM EXAMINATIONS, April 2024**

**Set-1**

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

**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: 15-20% - Minus 3 Marks, above 30% - Reappear

**Note: Attempt all questions**

**Q. No. 1**

**Scenario: The Gamification of Education**

Research Problem: Traditional classroom learning can sometimes feel monotonous and struggle to hold student interest. Gamification, the application of game-like elements (points, badges, leaderboards) into non-game contexts, has emerged as a potential solution to boost student engagement and motivation. However, the effectiveness of gamification in education remains a topic of debate.

1. Which research design(s) and method would be most appropriate for the researcher. Justify with an argument **(2 marks)**
2. State any three hypotheses towards this research **(2 Marks)**
3. Identify the respondent for the research. Justify with an argument **(2 Marks)**

**Q. No. 2**

Justify and explain each of the following sampling methods **(2\*4 = 8 marks)**

1. A researcher is studying the impact of a new after-school reading program on student vocabulary development. The school has a diverse student population based on socioeconomic status (low, middle, high). The researcher has then randomly selected students within each subgroup.
2. A researcher is studying the experiences of people who use virtual reality (VR) for fitness purposes. Finding participants who engage in this relatively new activity can be challenging.
3. A marketing agency is conducting a survey to understand smartphone preferences among different age groups. They plan to recruit 200 participants with 50 participants from each age group based on convenience: 18-24, 25-34, 35-44, and 45+.
4. A library wants to assess the condition of their books. The library has a total of 10,000 books on the shelves. Due to time constraints, they plan to inspect every 50th book on the shelves.

**Q. No. 3**

**Case: Movie Streaming Preferences**

This case explores movie-watching habits and preferences for streaming services. Following is the research question suitable for a small questionnaire that utilizes various scales:

**Research Question:** How do viewers' demographics, movie genre preferences, and satisfaction with current streaming services influence their likelihood to subscribe to a new streaming platform?

Create a questionnaire based on the research question. Mention and justify the measurement scale used? **(8 Marks)**

**Q. No. 4: Scenario:** A botanist is studying the effect of different fertilizer types on the height of sunflower plants. They hypothesize that the type of fertilizer will have a significant impact on the average plant height. **(8 Marks)**

**Data:** The botanist measures the heights (in centimetres) of 10 sunflower plants for each of three fertilizer types: organic (1), balanced chemical (2), and high-nitrogen chemical (3).

|  |  |
| --- | --- |
| Type of Fertilizer | Height (Centimeters) |
| 1 | 120 |
| 1 | 123 |
| 1 | 100 |
| 1 | 112 |
| 1 | 103 |
| 1 | 94 |
| 1 | 106 |
| 2 | 109 |
| 2 | 100 |
| 2 | 98 |
| 2 | 115 |
| 2 | 132 |
| 2 | 133 |
| 2 | 78 |
| 3 | 119 |
| 3 | 121 |
| 3 | 145 |
| 3 | 156 |
| 3 | 98 |
| 3 | 167 |
| 3 | 123 |
| 3 | 176 |

**Q. No. 5** -This following data set explores the potential relationship between - viewer rating based on budget and marketing spend

|  |  |  |
| --- | --- | --- |
| Budget (Millions) | Marketing Spend (Millions) | Viewer Rating (1-5) |
| 100 | 50 | 4 |
| 80 | 30 | 3.5 |
| 40 | 20 | 4.5 |
| 200 | 80 | 3.8 |
| 60 | 40 | 4.2 |
| 30 | 15 | 4.8 |
| 70 | 25 | 3.2 |
| 10 | 5 | 4.1 |
| 5 | 2 | 4.7 |
| 15 | 8 | 3.9 |

1. Frame the suitable hypotheses and justify the test used **(4 Marks)**
2. Interpret the regression coefficients and assess the significance of each predictor in predicting Purchase Intention. **(4 Marks)**
3. Predict viewer rating when budget=55 and Marketing spend=65 **(2 Marks)**