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**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM**

**Third TRIMESTER (Batch 2024-2026)**

**END-TERM EXAMINATIONS, April 2025**

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

**Note: Attempt all questions**

**Q. No. 1**

A financial analyst is studying the impact of different investment strategies on portfolio returns. She collects data on the annual returns (%) of three types of portfolios: Growth Funds, Value Funds, and Index Funds. The analyst wants to determine whether there is a significant difference in the mean returns of these three investment strategies at a 5% significance level. The returns for a sample of five funds from each category are as follows: **(6 Marks)**

|  |  |
| --- | --- |
| Growth Fund | : 12, 15, 14, 10, 13 |

|  |  |
| --- | --- |
| Value Fund | : 8, 9, 7, 10, 6 |

|  |  |
| --- | --- |
| Index Fund: 11,12,13,10,9 |  |

**Q. No.2**

A researcher is examining consumer attitudes toward a new smartwatch brand recently introduced in the market. The study aims to explore how factors like technological innovation, aesthetic appeal, and peer recommendations influence consumers’ positive attitudes toward the smartwatch.

All variables are measured using a 7-point Likert scale.

1. Identify the research design. **(3 marks)**
2. Formulate the hypotheses for this study. **(3 marks)**

**Q. No.3**

A marketing researcher is interested in understanding what factors influence consumers' attitudes toward a new electric scooter brand. Attitude, in this context, refers to the consumer’s overall positive evaluation of the brand and their likelihood to recommend or consider purchasing it.

1. Conduct an appropriate test to determine whether Functional and Hedonic factors positively influence customer attitude toward a product, with Social Influence acting as an additional predictor following steps of hypothesis testing. **(5 marks)**
2. To what extent are the independent variables together useful in predicting the dependent variable? **(2 marks)**
3. If the company improves functional factors from 2.09 to 4.2 and hedonic factor from 3.88 to 5 (keeping other factors constant), what is the expected increase in Positive attitude?

 **(3 Marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Functional\_Factor** | **Hedonic\_Factor** | **Social\_Influence** | **Positive\_Attitude** |
| 4.50 | 3.40 | 3.02 | 6.74 |
| 3.86 | 5.85 | 3.31 | 7.00 |
| 4.65 | 3.99 | 2.39 | 6.58 |
| 5.52 | 2.94 | 2.30 | 6.55 |
| 3.77 | 4.82 | 4.31 | 7.00 |
| 3.77 | 2.78 | 4.86 | 5.78 |
| 5.58 | 4.21 | 3.43 | 7.00 |
| 4.77 | 2.04 | 4.50 | 6.59 |
| 3.53 | 2.67 | 3.86 | 6.03 |
| 4.54 | 4.20 | 2.85 | 7.00 |
| 3.54 | 4.74 | 3.86 | 6.56 |
| 3.53 | 4.17 | 5.04 | 7.00 |
| 4.24 | 3.88 | 3.46 | 6.82 |
| 2.09 | 3.70 | 5.06 | 5.88 |
| 2.28 | 2.52 | 1.00 | 4.37 |
| 3.44 | 3.28 | 4.32 | 6.69 |
| 2.99 | 3.54 | 3.59 | 7.00 |
| 4.31 | 5.06 | 3.20 | 7.00 |
| 3.09 | 4.34 | 3.59 | 6.86 |
| 2.59 | 2.24 | 1.51 | 4.55 |
| 5.47 | 4.32 | 3.28 | 6.85 |
| 3.77 | 3.61 | 3.86 | 6.70 |
| 4.07 | 3.32 | 4.98 | 7.00 |
| 2.58 | 4.61 | 2.98 | 7.00 |
| 3.46 | 5.03 | 2.69 | 6.96 |
| 4.11 | 4.93 | 3.00 | 7.00 |
| 2.85 | 3.16 | 4.42 | 6.13 |
| 4.38 | 3.69 | 3.83 | 6.47 |
| 3.40 | 4.33 | 2.97 | 7.00 |
| 3.71 | 4.98 | 4.01 | 7.00 |

**Q. No.4**

A) Identify and explain the sampling technique **(6 Marks)**

1. A company surveys every 10th visitor to their website from a daily list of logins
2. A central bank conducts a nationwide survey on inflation perception by randomly selecting 2,000 individuals from the national citizen register
3. A healthcare organization studies patient satisfaction by stratifying a hospital's patient list by department (e.g., surgery, pediatrics, oncology) and sampling proportionally from each.

B) Construct and explain the scale for the following **(6 Marks)**

1. A nurse asks a patient to describe pain using a verbal descriptor scale
2. Type of Bank account
3. Mode of payment to an e-commerce website.

**Q. No.5**

A digital media research agency wants to understand how people’s digital adaptability affects their preference for watching content. They conduct a survey asking participants to rate their digital adaptability and indicate their preferred OTT content viewing method.

Digital Adaptability:

Beginner (1), Advanced (2)

Preferred OTT Viewing Method:

Mobile App (1), Smart TV (2), Laptop/Desktop (3)

Use an appropriate statistical test to determine how an individual’s digital adaptability influences their preferred OTT viewing method, following all six steps of hypothesis testing using the table given below. **(6 Marks)**

|  |  |
| --- | --- |
| Digital Adaptability | Preferred OTT Viewing Method |
| 1 | 1 |
| 1 | 3 |
| 2 | 2 |
| 2 | 1 |
| 2 | 2 |
| 1 | 3 |
| 1 | 1 |
| 2 | 2 |
| 2 | 1 |
| 1 | 3 |