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**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM C**

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

**END-TERM EXAMINATIONS, April 2025**

**Set-2**

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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**

**BlinkBite’s Missing Orders Mystery**

BlinkBite, a growing food delivery startup, had been celebrating a strong launch with bright interface designs and colorful branding across social media. But suddenly, the order-tracking dashboards began flashing red indicators. Their weekly performance reports showed a sharp dip in re-orders. Visual charts showed that while app downloads remained steady, actual repeat usage was declining.

Customer journey videos revealed that users often exited the app after the order status screen. Screenshots from user feedback featured comments like, “Not sure if the food is even coming” and “Felt clueless after placing the order.”

The marketing team brainstormed to first understand what’s confusing users, followed by a survey to track patterns in dissatisfaction. Finally, they considered testing a new animated order-tracker interface to visually guide customers through each delivery step.

Now, the management must define the real problem, design the right research approach, and form meaningful research questions and hypotheses.

**Questions**

1. List the visible signs that indicated BlinkBite had a business problem. **(2 Marks)**
2. Frame a research question that BlinkBite might explore. **(2 Marks)**
3. Suggest which kind of study BlinkBite should conduct to test if animated tracking improves customer satisfaction. **(2 Marks)**
4. Write one hypothesis to test the effect of animated trackers on customer retention. **(2 Marks)**

**Q. No.2**

**BrightTech's Employee Wellness Program Feedback (6 Marks)**

BrightTech, a mid-sized software development company, recently launched a new employee wellness program. The program includes gym memberships, mental health support, and flexible working hours. Initially, employees were excited by the bright, interactive promotional banners in the office, showcasing these benefits.

However, despite positive signs at the start, HR noticed that employee engagement with the program had started to drop visibly. The gym wasn’t getting much foot traffic, and feedback sessions showed mixed feelings about the mental health resources. HR is now interested in understanding how employees feel about wellness initiatives, how they perceive their effectiveness, and whether they intend to participate more actively in future.

Design a short questionnaire (10-15 questions) to evaluate the given research question using different measurement scales.

**Research question: "How do employees' attitudes towards the wellness program, their perceptions of its usefulness, and their emotional engagement with the benefits influence their intention to continue participating?"**

**Q. No. 3**

**Identify the appropriate sampling technique for the given situation and briefly explain the procedure. (2\*4 = 8 marks)**

1. A retail store’s staff walks up to friendly-looking customers and asks them to record their shopping feedback using an audio tablet.

2. A retail franchise selects one random team member from each outlet and invites them to join a corporate audio brainstorming call.

3. A business school researcher asks for 5 students from each specialization to participate in a voice survey on learning methods.

4. To understand customer satisfaction, a national coffee chain plays a jingle on their app and invites customers from every 10th bill to share feedback. The manager listens carefully to the voice of different customers from various cities, aiming for a fair picture.

**Q. No. 4 (8 Marks)**

**Testing Product Display Strategies in Action Zones:**

UrbanPeak Activewear, a brand known for its flexible gym and outdoor clothing, decided to revamp how it physically displays products in its showrooms. They created three different display zones:

* Mannequin Movement Area (customers could touch and stretch the displayed clothes),
* Mirror Trial Zone (interactive mirrors for trying),
* Tactile Rack Zone (products hung for feel & stretch test).

These display styles were tested across three store formats:

* Mall Showrooms,
* High-Street Stores, and
* Experience Centers.

To measure real-time customer response, store managers tracked the engagement level on a 1–10 scale, capturing actions like lifting clothes, checking flexibility, trying clothes, or asking for assistance. The marketing head now wants to know whether display zone significantly affects the customer engagement score.

**Data (15 Customers):**

| **Customer ID** | **Store Format** | **Display Zone** | **Engagement Score** |
| --- | --- | --- | --- |
| 1 | Mall Showroom | Mannequin Movement | 7.0 |
| 2 | Mall Showroom | Mirror Trial | 6.5 |
| 3 | Mall Showroom | Tactile Rack | 5.5 |
| 4 | High-Street Store | Mannequin Movement | 8.0 |
| 5 | High-Street Store | Mirror Trial | 7.5 |
| 6 | High-Street Store | Tactile Rack | 6.0 |
| 7 | Experience Center | Mannequin Movement | 7.5 |
| 8 | Experience Center | Mirror Trial | 8.0 |
| 9 | Experience Center | Tactile Rack | 6.5 |
| 10 | Mall Showroom | Mirror Trial | 6.0 |
| 11 | High-Street Store | Tactile Rack | 6.5 |
| 12 | Experience Center | Mirror Trial | 8.5 |
| 13 | Mall Showroom | Mannequin Movement | 6.5 |
| 14 | High-Street Store | Mirror Trial | 7.0 |
| 15 | Experience Center | Tactile Rack | 6.0 |

**Q. No. 5**

**Impact of Workplace Environment on Employee Satisfaction:** In a mid-sized software company, the HR department is interested in understanding what factors most strongly influence employee satisfaction. After conducting an internal survey, they collected ratings from 15 employees on various factors that contribute to their job satisfaction. The company focuses on three key areas for improvement:

1. Workplace Flexibility (rated 1–10)
2. Managerial Support (rated 1–10)
3. Career Growth Opportunities (rated 1–10)

The HR team aims to understand how these three factors influence overall employee satisfaction, which has been rated by employees on a scale of 1 to 10. With the belief that their findings can optimize future HR policies, the team now wants to see if workplace flexibility, managerial support, and career growth opportunities significantly impact satisfaction.

The HR manager is eager to use this data to craft targeted policies that will improve job satisfaction across the company.

**Data Table: 15 Employees' Ratings**

| **Employee ID** | **Flexibility** | **Managerial Support** | **Career Growth** | **Satisfaction** |
| --- | --- | --- | --- | --- |
| 1 | 8 | 7 | 9 | 8.5 |
| 2 | 6 | 6 | 7 | 6.5 |
| 3 | 7 | 8 | 6 | 7.0 |
| 4 | 5 | 5 | 5 | 5.5 |
| 5 | 9 | 9 | 9 | 9.0 |
| 6 | 6 | 6 | 6 | 6.0 |
| 7 | 7 | 7 | 8 | 7.5 |
| 8 | 8 | 8 | 7 | 8.0 |
| 9 | 6 | 5 | 6 | 5.5 |
| 10 | 9 | 8 | 9 | 9.5 |
| 11 | 7 | 7 | 7 | 7.0 |
| 12 | 8 | 8 | 8 | 8.5 |
| 13 | 6 | 5 | 5 | 5.0 |
| 14 | 9 | 9 | 8 | 9.5 |
| 15 | 7 | 6 | 6 | 6.5 |

**Variable Information**

* **Dependent Variable**:
  + Satisfaction (Overall Employee Satisfaction – rating scale 1–10)
* **Independent Variables**:
  + Workplace Flexibility (rating 1–10)
  + Managerial Support (rating 1–10)
  + Career Growth Opportunities (rating 1–10)

**Questions:**

1. To what extent are the independent variables together useful in predicting the dependent variable? **(1 Marks)**
2. Identify variable(s) have a significant impact on the outcome. Support your answer with relevant values. **(2Marks)**
3. Write the final statistical model. **(2Marks)**
4. If the workplace flexibility score improves from 5 to 8 (keeping other factors constant), what is the expected increase in satisfaction? **(2 Marks)**
5. Assess multicollinearity diagnostics and implement appropriate measures for mitigation if detected. **(3 Marks)**