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**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**

**PGDM / PGDM (M) / PGDM (SM)**

**SECOND TRIMESTER (Batch 2023-25)**

**END TERM EXAMINATIONS, JANUARY 2024**

**Set 1 – Sec A & C**

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| Course Name | **Essentials of Business Analytics** | Course Code | **20801** |
| Max. Time | **2 hours** | Max. Marks | **40 MM** |

INSTRUCTIONS: **(Read them very carefully)**

1. This is an **open book** examination. You may refer to your text book.
2. There are two sections in the question paper. Both are compulsory to attempt.
3. Kindly upload a single Excel file(workbook) answering the following questions in separate worksheets and saved as (\*.xlsx)
4. Write your analysis in the same worksheet.
5. Name the worksheet with the question number(example: If the worksheet is for answering the question number 4, name it as Q\_4)
6. Save the excel with your name as Name\_RollNo\_EBA (example: Aayushi\_Kalra\_25\_EBA)
7. Kindly go through data\_dictionary for variable description.
8. Marks for each question are written in bracket at the end of each question.

**Part - A**

**Read the case below and answer the ques 1-3**

**Jute Junkies** manufactures and sells jute bags at its retail store located in Noida. A year ago, the company developed a website and began selling its bags over the internet. Website sales have exceeded the company’s expectations and management is now considering strategies to increase its sales even further. To learn more about online customers, a sample of 150 transactions was selected from the previous month’s sale. Data and its description is provided in the file JJ.xlsx.

1. Summarize and interpret the behavior of online customers by generating a crosstab for the browser and the amount spent. **(5 marks)**
2. Explore the relationship between the time spent on the website and amount spent numerically and graphically.**(5marks)**
3. The brand manager at the **Jute Junkies** was interested in understanding whether the amount spent is significantly different for the days of the week. Test for α = 0.05. **(10 marks)**

**Part - B**

1. **The Ohm Zone** an electronic company manufactures electronic items and has estimated the following costs for new design of one of its products:

Rental for land(manufacturing unit): $ 150000

Machinery cost: $ 100000

Material cost per unit: $ 35

Labour cost per unit: $ 10

Revenue per unit: $ 60

1. Build a spreadsheet model that calculates a profit or loss. Compare the model if company has different production levels. **(15 marks)**
2. Identify the breakeven point. **(5 marks)**