



**POST GRADUATE DIPLOMA IN MANAGEMENT (2021-23)**  
**SPECIAL MID TERM EXAMINATIONS (TERM - I)**  
**Academic Session- 2021-22**

**Subject: Quantitative Techniques in Management**

**Time: 01.30 hour**

**Subject Code: PG14**

**Max Marks: 20**

**Note:**

**1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.**

**2. All questions are compulsory in Section A, B & C. Section A carries 1 Case Study of 8 marks. Section B carries 3 questions of 2 marks each and Section C carries 2 questions of 3 marks each.**

**SECTION A**

**2 \* 4 Marks= 8 Marks**

**Q. 1: Case Study:**

A supermarket that has a chain of 15 retail outlets in a city wants to predict the monthly sales of its entire operation based on the performance of all its retail outlets. The number of customers who visited the supermarket during one typical month in all the outlets were recorded along with the money value purchase made by them. Based on the data that are given at the end, answer the following:

- Find the Mean and Median of number of Consumers.
- Find the Standard Deviation of Sales.

Based on the calculations, interpret the Result.

<b>Retail Outlet</b>	<b>Consumers</b>	<b>Sale (Rs Lakh)</b>
1	1814	22.4
2	1852	22.1
3	1012	13.68
4	1482	48.42
5	1578	18.84
6	1778	20.116
7	1748	18.9
8	1020	13.46

**SECTION B**

**3 \* 2 Marks= 6 Marks**

**Q. 2: Define and differentiate between Nominal and Ordinal Data with example.**

**Q.3: Explain the role of data in Statistical Decision Making.**

**Q.4: Which Factory has greater variance?**

	<b>Factory A</b>	<b>Factory B</b>
<b>Avg. Daily Wages</b>	120	85
<b>Variance of Daily Wages</b>	16	25

**SECTION C**

**2 \* 3 Marks= 6 Marks**

**Q.5: Write short notes on the following:**

- Pie Charts
- Histograms

**Q.6: Explain different measures of central tendency and mention advantages of Arithmetic Mean.**

## Mapping of Questions with Course Learning Outcome

<b>COs</b>	<b>Question Number(s)</b>	<b>Total Marks Allocated to the CO</b>
CO1	2,3,4	<b>6</b>
CO2	1	<b>8</b>
CO3	5, 6	<b>6</b>
CO4	NA	<b>0</b>