

2024

ECONOMICS — HONOURS — PRACTICAL

Paper : SEC-2P

[Introductory Statistics and Application (II)]

Full Marks : 50

The figures in the margin indicate full marks.

Attempt *question no. 1* and *any three* questions from the rest.

1. Based on the given dataset, here are ten analytical questions which are to be answered using **Pivot Tables** to gain insights. Then make all these insights clear for visualization using **Pivot Charts and Slicers / Timeline**. 2×10
 - (a) Which product type generates the highest total sales revenue?
 - (b) What is the total sales revenue and average discount given per region?
 - (c) How does the sales revenue and volume vary by country within each region?
 - (d) What is the monthly trend in sales revenue over the years for each region?
 - (e) Which city within each country has the highest sales volume?
 - (f) What is the relationship between discount percentage and average sale price across different product types?
 - (g) What are the top five products by sales revenue in each region?
 - (h) What is the average list price versus average sale price for each product type?
 - (i) Which regions have the highest and lowest profit margins?
 - (j) How does sales performance change over time?
2. For the given dataset, draw the **Lorenz Curve** and then calculate the **Gini Coefficient**. 5+5
3. (a) Apply **Conditional Formatting**, for the given data, highlight those cells where Sales > 500 and Profit < 0.
(b) Using the given sales data, apply **Advanced Filters** with respect to Country : France, Segment : Corporate, Ship Mode : Priority, Profit > 100. 5+5

Please Turn Over

4. For the given dataset,

(a) Use appropriate **logical formula** to check whether the student has passed or not in Economics.
Criteria : Marks ≥ 40 .

(b) Grade the students' overall performance using appropriate **logical formula**.

Criteria : If the student scored > 250 : A, ≥ 200 : B, < 200 : C.

5+5

5. For the given dataset, use appropriate **statistical formulas** for each case and calculate the following measures of descriptive statistics :

1×10

Sample size, Mean, Median, Max., 25th Percentile, Standard Deviation, 2nd Largest Value, 3rd Quartile, Skewness and Kurtosis.

6. For the given data, draw **Histogram, Frequency Polygon** and both types of **Ogives**.

(3+3)+(2+2)