

Unit 2: Presentation of Data by Diagrams and Graphs

Business Statistics
Simple Explanation with Examples
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2.1 Introduction

- ▶ • Presentation of data means showing data in a simple and understandable form.
- ▶ • Diagrams and graphs convert numerical data into visual form.
- ▶ • They help in quick comparison and analysis.
- ▶ • Widely used in business, economics and research.

Data Presentation Techniques

- ▶ • Textual Presentation
- ▶ • Tabular Presentation
- ▶ • Diagrammatic Presentation
- ▶ • Graphical Presentation

Objects of Diagrammatic Presentation

- ▶ • To simplify complex data
- ▶ • To facilitate comparison
- ▶ • To save time
- ▶ • To attract attention
- ▶ • To support decision making

Rules of Diagrammatic Presentation

- ▶ • Proper title should be given
- ▶ • Diagrams should be simple and clear
- ▶ • Proper scale must be used
- ▶ • Neatness and accuracy are essential
- ▶ • Source of data should be mentioned

Importance of Diagrammatic Presentation

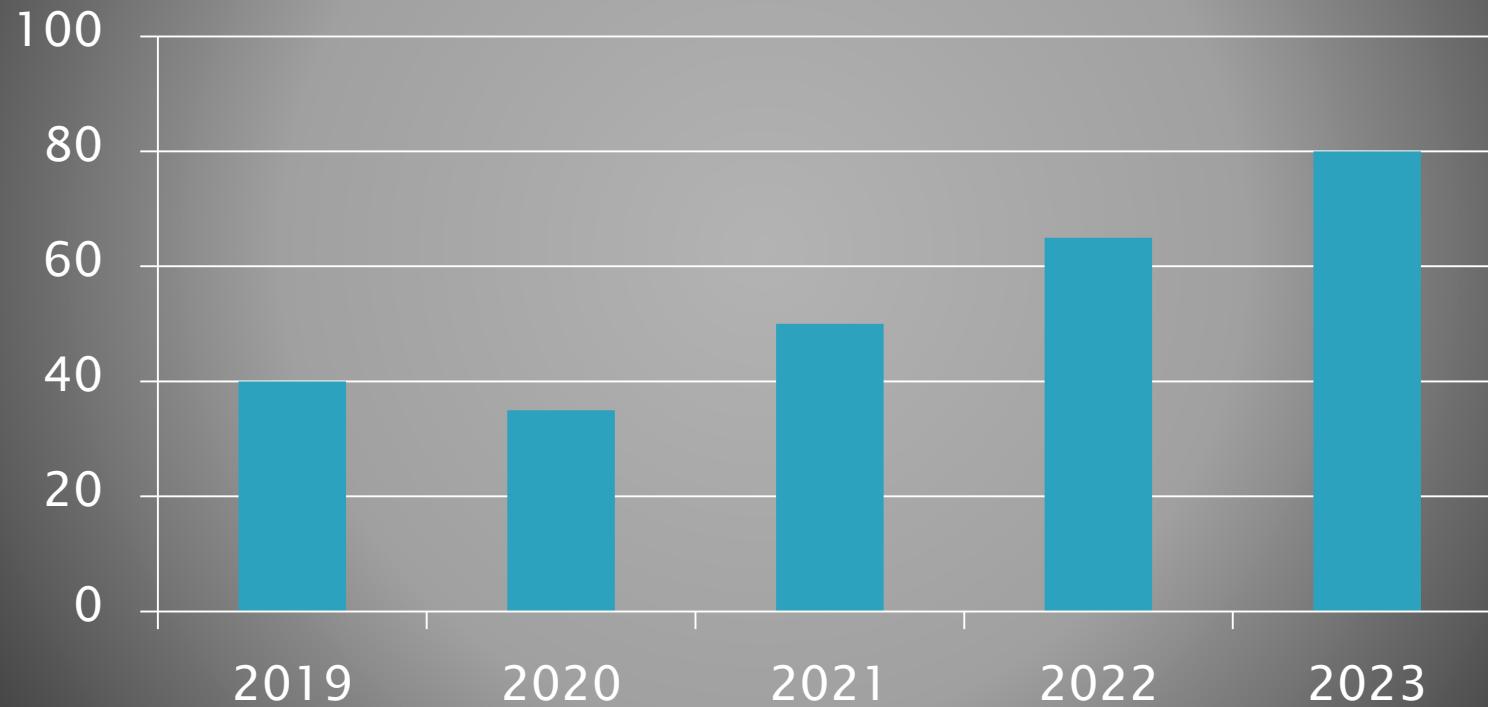
- ▶ • Easy to understand
- ▶ • Useful for illiterate persons
- ▶ • Helps quick decision making
- ▶ • Attractive and effective presentation

Types of Diagrams

- ▶ • One Dimensional Diagrams (Bar Diagrams)
- ▶ • Two Dimensional Diagrams (Area Diagrams)
- ▶ • Three Dimensional Diagrams (Volume Diagrams)
- ▶ • Pie Diagram
- ▶ • Pictograms

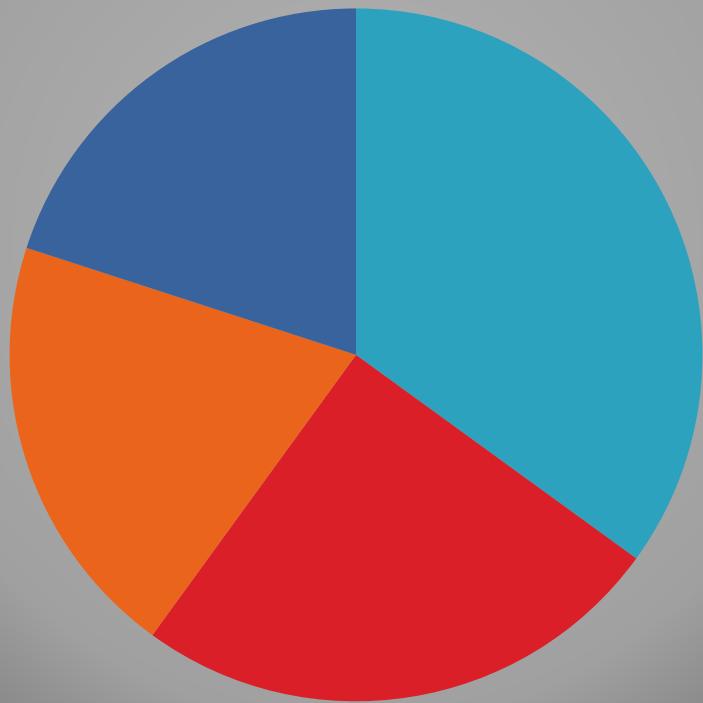
Simple Bar Diagram – Sales of Company (₹ in Lakhs)

Example



Pie Diagram - Market Share (%)

Example



Limitations of Diagrams

- ▶ • Lack of accuracy
- ▶ • Not suitable for large data
- ▶ • Can mislead if scale is improper
- ▶ • Not useful for further analysis

2.3 Graphs – Introduction

- Graphs present data on graph paper using axes.
- X-axis shows independent variable
- Y-axis shows dependent variable
- More precise than diagrams

Types of Graphs

- ▶ • Line Graph
- ▶ • Histogram
- ▶ • Frequency Polygon
- ▶ • Ogive (Cumulative Frequency Curve)

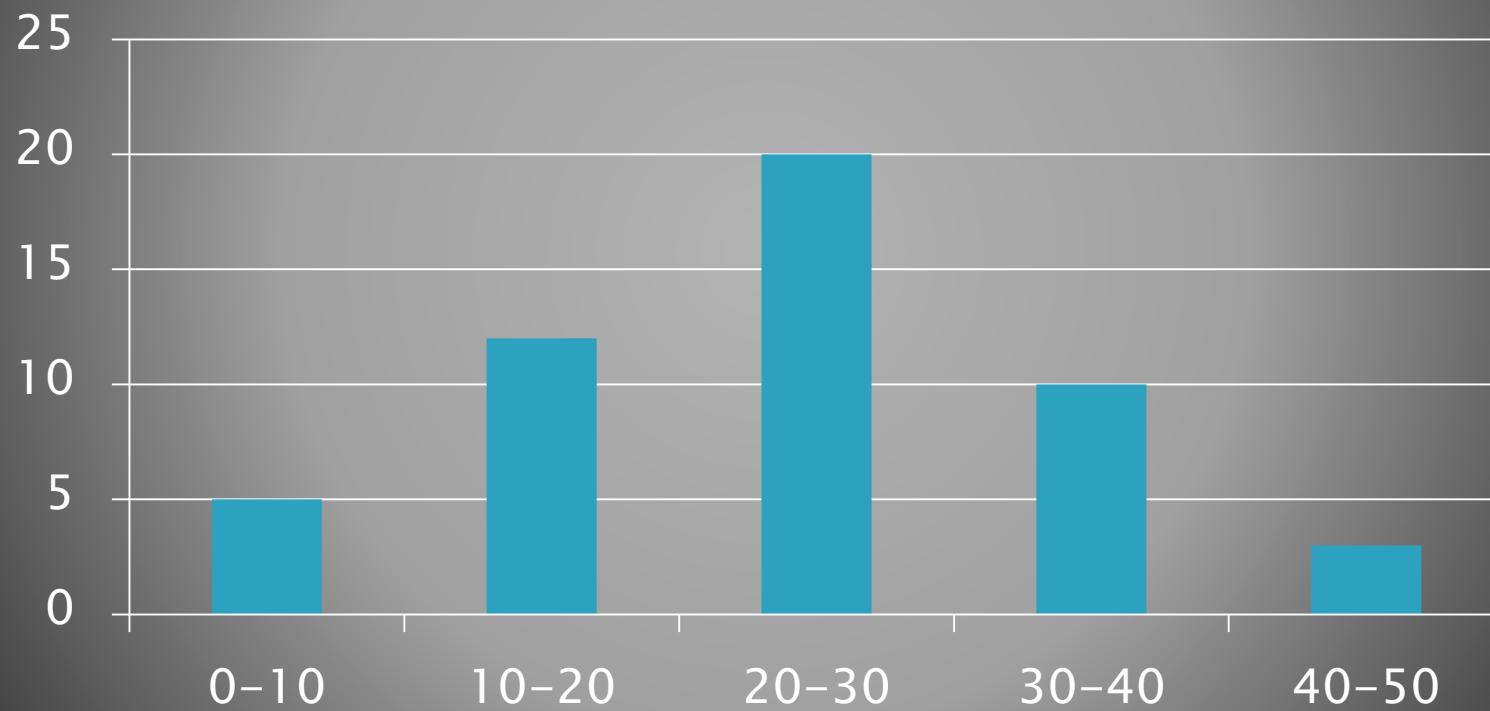
Line Graph - Profit Trend (₹ in Lakhs)

Example



Histogram - Distribution of Students Marks

Example



Uses of Graphs

- ▶ • Shows trend and growth
- ▶ • Helps in forecasting
- ▶ • Easy comparison over time
- ▶ • Widely used in business reports

Conclusion

- ▶ • Diagrams and graphs simplify data presentation
- ▶ • Diagrams are attractive and simple
- ▶ • Graphs are accurate and analytical
- ▶ • Both are essential tools of business statistics