(Olympiad Comprehensive Notes)

NOTES

Introduction

You might have seen in the books, newspaper etc, graphs are used to give some valuable information, like people living under poverty line in different states, number of mal-nutritioned child in different Asian countries, number of unemployed people in India, number of uneducated people in a particular state etc. In this chapter we will study about the data and analysis of data with the help of graph.

Data

The information, which is in the numeral form, is called data. The data is gathered in various ways. Then it is manipulated and represented on the graph.

Raw Data

The initial data that the observer collects himself is called raw data.

Grouped Data

When raw data is arranged in a table in order to extract the information contained by it easily, is called grouped data.

Presentation of Data

Data is presented with the help of different types of graphs, which are as follows.

Pictograph

When the data is represented on the graph with the help of pictures, it is known as pictograph.

> Example

In the following pictograph, number of students who are present in different classes has been shown:

Class-I	Ó	e,	<u> </u>	Ó	
Class-II	E.	â			
Class-III		<u>الم</u>			
Class-IV	60	[ولي	0	0	লি ও,
Class-V	(Fe	(See	Real Providence		

Key: One boy represents 8 students.

- (a) How many students were present in class III?
- (b) In which class least number of students were present?
- (c) How many students were present in class IV and class V together?
- (d) How many more students was present in class IV in comparison of class III

Solution:

(a) 16 (b) Class III (c) 64 (d) 24

Barograph

When the data is represented on the graph with the help of bars, it is known as Barograph.

> Example





(a) How many fans were sold by the shop during the week?

(b) On which day, maximum number of fans were sold?

- (c) How many more fans were sold on Wednesday in comparison to Tuesday?
- (d) On which day 400 fans were sold?

Answer:

- (a) 2100
- (b) Wednesday
- (c) 400
- (d) Saturday