

General Science and Ability

Q:- Differentiate between a "Pictogram" and "Histogram" with examples

Introduction :-

Pictogram and Histogram are both graphical representations used in statistics and data visualization, but they serve different purposes and convey information in distinct way.

Pictogram :-

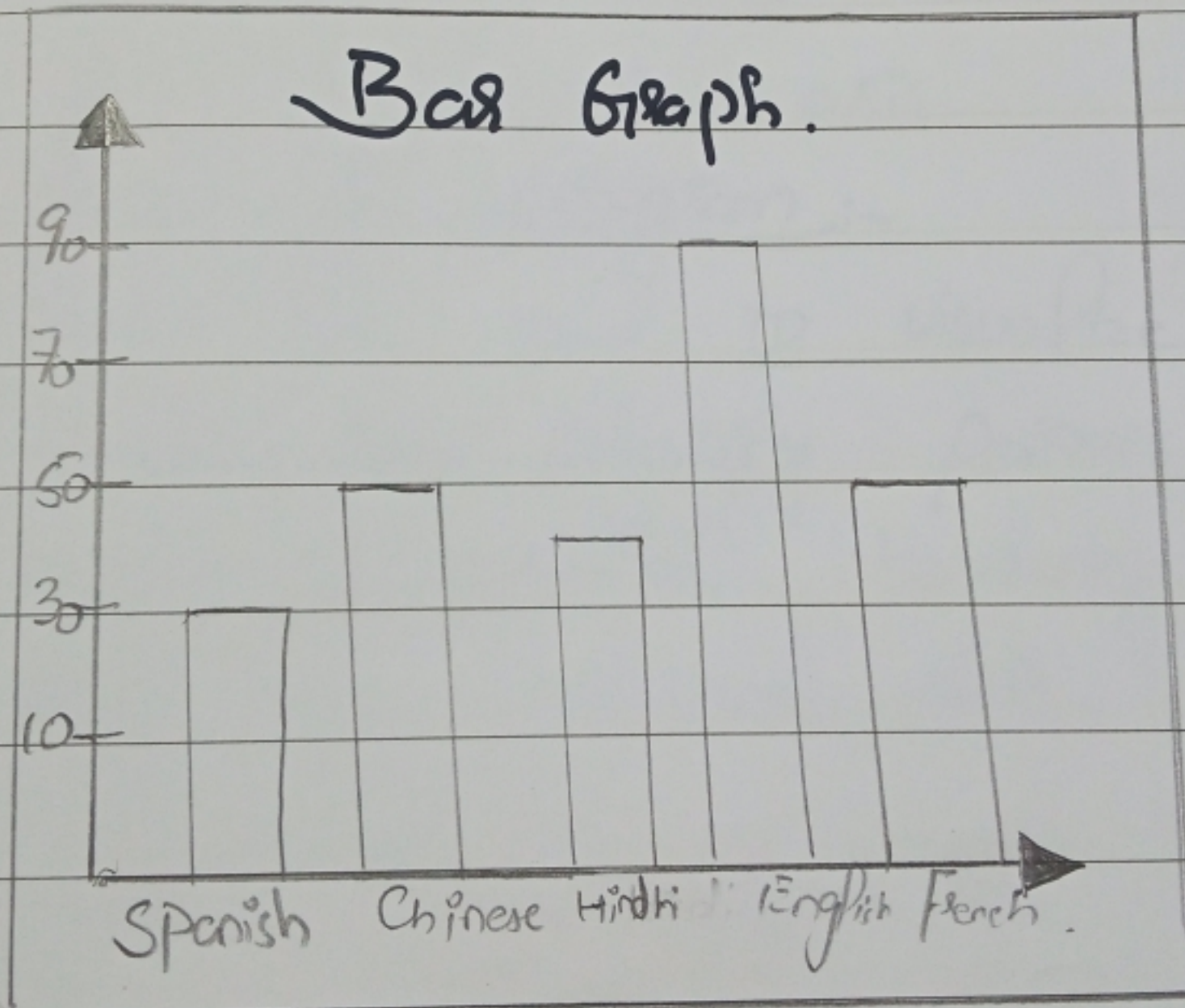
Defination:- A pictogram is a visual representation of data using icons and symbols to convey information. Each symbol represents a certain quantity, and the size or number of symbols indicates the frequency or value of the data.

Purpose of Pictogram :-

Pictograms are often used to make data more engaging and visually appealing especially when dealing with categorical or qualitative data.

Examples of Pictogram:

Considers a pictogram representing the number of cars sold in a month. Each car icon may represent 100 units, and the pictogram would show a certain number of car icons for each month.



Languages Spoken

Histogram :-

Definition :-

A histogram is a graphical representation of the distribution of a continuous data set. It consists of a series of bars, where the height of each bar represents the frequency or count of data points within a specific range on the horizontal axis.

Purpose of Histogram :-

Histograms are used to visualize the shape of a distribution, identify patterns and understand the central tendency and variability of continuous data.

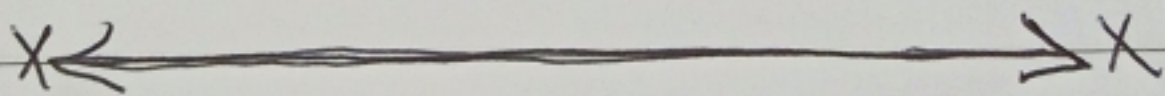


Examples of Histogram:-

Suppose you have a data set representing the height of a group of individuals. The histogram would display bars representing the frequency of individuals falling within height ranges (e.g., 30-50 cm, 50-70 cm, and so on).

Conclusion:-

In conclusion, a pictogram is suitable for representing categorical or qualitative data using symbols, while histogram is used for visualizing the distribution of continuous data through bars that represent frequency in specific intervals.



Q:- A man buys 5kg of meat at Rs. 500 per kg. In addition, for every kilogram of meat purchased, he has to pay a consumption tax of 6% on the selling price. Calculate the total amount of money that he has to pay.

Solution :-

Let's break down the calculation step by step:

1) Cost of Meat :-

The man buys 5kg of meat at Rs. 500 per kg

$$\text{Cost of meat} = \text{Weight of meat} \times \text{Cost per kg}$$

$$\text{Cost of meat} = 5\text{kg} \times \text{Rs. } 500/\text{kg}$$

$$\text{Cost of meat} = \text{Rs. } 2500$$

2) Consumption Tax :-

The consumption tax is 6% on the selling price of the meat.

$$\text{Tax} = 6\% \times \text{Cost of meat}$$

$$\text{Tax} = 0.06 \times 2500$$

$$\text{Tax} = \text{Rs. } 150$$

Total Amount:-

The total amount of the man has to pay is the sum of the cost of meat and the consumption tax.

$$\text{Total amount} = \text{Cost of meat} + \text{Tax}$$

$$\text{Total amount} = 2500 + 150$$

$$\text{Total amount} = \boxed{2650}$$

Therefore, the total amount of money that the man has to pay is $\boxed{\text{Rs. } 2650}$

