

1 Diagrammatic and Graphic Presentation

Design an angular diagram to exhibit the information relating to the expenditure pattern of a student studying in a college per month

Nature of Fees	Amount [R.s]
College	80
Hostel	190
	110

To design an angular diagram [or pie chart] for a student's monthly expenditure pattern, we will calculate the angle for each expenditure category based on the total expenditure

Step: 1 Calculate the total Expenditure

$$\text{Total Expenditure} = 80 + 190 + 110 = 380 \text{ Rs.}$$

Step: 2 Calculate the Angle for Each category

To find the angle for each category in the pie chart, we use the formula,

$$\text{Angle for each category} = \frac{\text{Amount of the category}}{\text{Total Expenditure}} \times 360$$

Calculations

1) College Fees

$$\text{Angle} = \frac{80}{380} \times 360 = 75.79^\circ$$

2) ~~Hostel~~ Hostel Fees

$$\text{Angle} = \frac{190}{380} \times 360 = 180^\circ$$

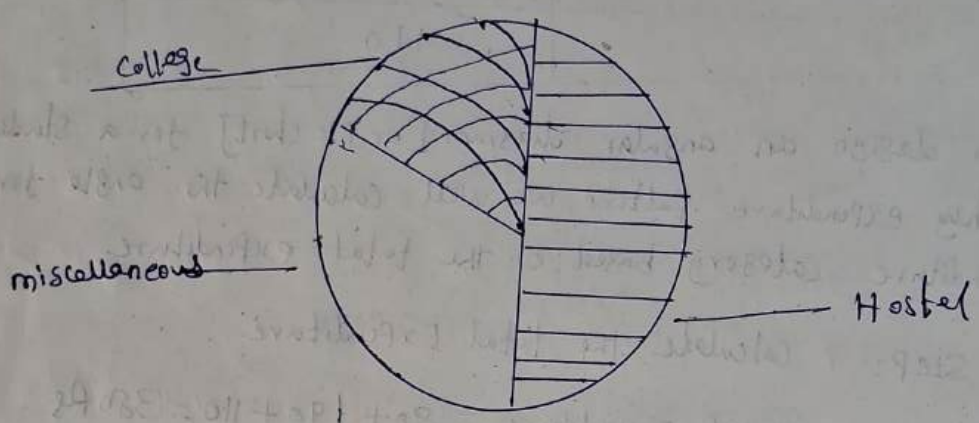
3) Miscellaneous

$$\text{Angle} = \frac{110}{380} \times 360 = 104.21^\circ$$

Step: 3 Construct the Angular Diagram

- 1) Draw a circle to represent the entire monthly expenditure.
- 2) Using a Protractor, mark.

- * An angle of 75.79° for College Fees
- * An angle of 180° for Hostel Fees.
- * The remaining angle, 104.21° for miscellaneous.



This pie chart will visually display the proportion of each category in the student's total monthly