

Class 12 Geography PYQ

Graphical Representation of Data

Practical Work in Geography Part II Chapter 3 practice pack for 2026-27

Source note

The local chapterwise PYQ sheet returned no extractable rows for this PWG chapter. This pack therefore uses NCERT Chapter 3 themes and common CBSE board-style practical questions. Use it for chapter-wise revision before full-paper practice.

One-Mark and Two-Mark Checks

- Q1. Define graphical representation of data in geography practical work. [board-style • practice]
- Q2. State one advantage of representing statistical data through graphs. [board-style • practice]
- Q3. Name the graph used to show continuous change over time. [board-style • practice]
- Q4. What is a simple bar graph? [board-style • practice]
- Q5. Mention one situation where a multiple bar graph is useful. [board-style • practice]
- Q6. What is a pie diagram? [board-style • practice]
- Q7. State the formula used to convert a data value into a pie-chart angle. [board-style • practice]
- Q8. What is the difference between an arithmetic line graph and a bar graph? [board-style • practice]
- Q9. Name one graph suitable for comparing population of different states. [board-style • practice]
- Q10. Why should every graph carry a title and scale? [board-style • practice]
- Q11. What is meant by a legend in a thematic graph? [board-style • practice]
- Q12. Write one precaution while drawing bars in a bar diagram. [board-style • practice]

Three-Mark and Four-Mark Questions

- Q1. Explain the steps followed to draw a simple bar graph from a geographical data table. [board-style • practice]
- Q2. Differentiate between simple bar graph and multiple bar graph with one example. [board-style • practice]

- Q3.** A district table gives rainfall for five months. Explain how a line graph can represent the trend. [board-style • practice]
- Q4.** Describe how a pie chart is prepared after calculating sector angles. [board-style • practice]
- Q5.** Why is scale selection important in graphical representation of data? [board-style • practice]
- Q6.** Explain how a compound bar graph helps compare two or more components of a total. [board-style • practice]
- Q7.** Give three rules that make a graph clear, accurate and readable. [board-style • practice]
- Q8.** How can a graph help students interpret a table faster than plain numerical data? [board-style • practice]
- Q9.** Write the steps for converting population data into percentage shares before drawing a pie diagram. [board-style • practice]
- Q10.** Why should students avoid using unequal spacing on the axis of a line graph? [board-style • practice]

Five-Mark and Six-Mark Long Answers

- Q1.** Describe the complete method of drawing a line graph for monthly temperature or rainfall data. Include title, axis, scale and interpretation. [board-style • practice]
- Q2.** Explain simple bar, multiple bar and compound bar diagrams. Write one geographical use of each. [board-style • practice]
- Q3.** A table gives occupational structure of a population. Explain how you would choose and draw a suitable graph for the data. [board-style • practice]
- Q4.** Discuss the importance of graphical representation of data in Geography practical work. [board-style • practice]
- Q5.** Compare bar graph, line graph and pie chart as tools of geographical data presentation. Mention one strength and one limitation of each. [board-style • practice]
- Q6.** Explain the precautions a student should follow while drawing diagrams for a board practical file. [board-style • practice]

Diagram and Practical-File Prompts

- Q1.** Draw a flow chart showing data table, choice of graph, scale, plotting, labelling and interpretation. [board-style • practice]

- Q2.** Draw a sample bar graph for population values of five states using a clear scale. [board-style • practice]
- Q3.** Prepare a pie chart from four percentage values of land use and label every sector. [board-style • practice]
- Q4.** Draw a concept map linking title, scale, axis, legend, source note and interpretation. [board-style • practice]

Case-Based Graph Practice

Case 1: Graphical Representation

A table records monthly rainfall in centimetres for June, July, August, September and October as 12, 28, 35, 24 and 10.

- Q1.** Which graph is most suitable to show the monthly trend? [board-style • practice]
- Q2.** Write two steps for drawing this graph accurately. [board-style • practice]
- Q3.** What does the highest plotted value show about the rainfall pattern? [board-style • practice]

Case 2: Graphical Representation

A class survey records land-use shares as forest 20 percent, net sown area 45 percent, fallow land 15 percent and other uses 20 percent.

- Q1.** Which diagram can show the share of each category in the total? [board-style • practice]
- Q2.** Calculate the sector angle for the net sown area. [board-style • practice]
- Q3.** Write one sentence interpreting the largest land-use category. [board-style • practice]

Revision Grid

Graph	Best use	Common error to avoid
Line graph	Continuous change over time such as rainfall or temperature	Unequal spacing on the time axis
Simple bar	Comparing one variable across places or years	Bars with different widths
Multiple bar	Comparing two or more related series	Missing legend or unclear colours
Compound bar	Showing components within a total	Not keeping each total on the same scale
Pie chart	Showing percentage share of a whole	Sector angles not adding to 360 degrees
Legend	Explaining symbols, colours or categories	Placing symbols without labels

Quick Formula and Design Bank

- Pie-chart sector angle = category value divided by total value multiplied by 360 degrees.
- Percentage share = category value divided by total value multiplied by 100.
- A graph must include title, scale, axis labels, legend where needed and source note when data is provided.
- A short interpretation sentence should explain the highest value, lowest value or main trend.

Graph Choice Map

Match the data pattern with the graph before drawing.

LINE

trend through time

BAR

compare categories

PIE

share of a whole

SCALE

same unit spacing

LEGEND

label every series

READ

write the trend