

## Worksheet: Correlation

Gujarat State Board · Class 11 · Economics · 3 questions · 12 marks

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 12

**Q1.** Identify the type of correlation (positive, negative, or zero) for each pair: (a) Price and quantity demanded. (b) Height and income. (c) Study hours and marks. (d) Temperature and sales of woollen clothes. [2 marks]

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**Q2.** Calculate Spearman's Rank Correlation for the following data on students' ranks in Maths and Economics: Student: A, B, C, D, E, F. Maths rank: 1, 2, 3, 4, 5, 6. Economics rank: 2, 4, 1, 5, 3, 6. [4 marks]

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**Q3.** Calculate Karl Pearson's  $r$  using assumed mean method for: X: 10, 20, 30, 40, 50; Y: 25, 35, 55, 65, 70. Use assumed mean  $A = 30$  for X and  $B = 55$  for Y. [6 marks]

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