

## Worksheet: Measures of Dispersion (Range, Quartile Deviation, Standard Deviation)

IB · Class 11 · Economics · 3 questions · 13 marks

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

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

Score: \_\_\_\_\_ / 13

**Q1.** For the following data: 15, 22, 8, 35, 12, 28, 45, 20. Calculate (a) Range (b) If  $Q_1 = 13$  and  $Q_3 = 31.5$ , find Quartile Deviation. [3 marks]

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**Q2.** Calculate the Standard Deviation and Variance for the following data: 4, 8, 12, 16, 20. [4 marks]

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**Q3.** Two batsmen's scores across 6 innings are: Batsman A: 48, 52, 55, 60, 42, 55 ( $\bar{X} = 52$ ,  $\tilde{A} = 5.77$ ). Batsman B: 30, 75, 20, 85, 15, 90 ( $\bar{X} = 52.5$ ,  $\tilde{A} = 30.4$ ). (a) Calculate the Coefficient of Variation for each. (b) Which batsman is more consistent and why? (c) Why is CV a better measure of comparison than SD here? [6 marks]

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