

PART I

Questions 1 to 14 carry a total of 28 marks.

Do not write
in this margin

Question 1

Calculate the sample interquartile range for the following list of 40 data values, which have been arranged in ascending order.

[2]

46	63	65	67	68	70	71	72	73	74
74	75	76	77	78	78	79	79	80	80
80	80	81	81	82	82	83	85	85	86
88	88	89	89	89	91	91	92	93	97

$$Q_L = x_{\frac{1}{4}(40+1)} = x_{10.25} = 74$$

$$Q_U = x_{\frac{3}{4}(40+1)} = x_{30.75} = 87.5 \quad Q_{IQR} = 87.5 - 74 = 13.75$$

$$FDS = (46, 74, 80, 87.5, 97)$$

Question 2

Write down the five-figure summary for the data list in Question 1.

[2]