Name: _____

IGCSE

Data

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

January 2019 Paper ~~1H~~ 2H Question 11

1 Twenty students took a Science test and a Maths test.

Both tests were marked out of 50

The table gives information about their results.

	Median	Interquartile Range
Science	27	18
Maths	24.5	11

Use this information to compare the Science test results with the Maths test results.

Write down **two** comparisons.

1 The median score for Science is higher – on average students got more marks in Science

2 The IQR is lower in Maths – results were more consistent in Maths (more spread out in Science)

(Total for Question 1 is 2 marks)

Sample Paper 1H Question 12

2 Here are the points that Carmelo scored in his last 11 basketball games.

~~23~~ ~~20~~ ~~14~~ ~~23~~ ~~17~~ ~~24~~ ~~24~~ ~~18~~ ~~16~~ ~~22~~ ~~21~~

(a) Find the interquartile range of these points.

14 ~~16~~ 17 ~~18~~ ~~20~~ (21) ~~22~~ ~~23~~ 23 ~~24~~ ~~24~~

23 – 17 = 6

6

(3)

Kobe also plays basketball.

The median number of points Kobe has scored in his last 11 games is 18.5
The interquartile range of Kobe's points is 10

(b) Which of Carmelo or Kobe is the more consistent points scorer?
Give a reason for your answer.

Carmelo. Carmelo has a lower interquartile range.

(1)

(Total for Question 2 is 4 marks)

June 2018 24 7

~~January 2019~~ Paper ~~1H~~ Question ~~1~~

3 The students in Class A and in Class B take the same examination.

There are 28 students in Class A and 32 students in Class B.
The mean score for all the students in both classes is 72.6
The mean score for the students in Class A is 75

28 + 32 = 60

(a) Work out the mean score for the students in Class B.

$$\text{mean} = \frac{\text{total}}{n}$$

$$\text{total} = \text{mean} \times n$$

total score for all = 72.6 × 60
= 4356

total score (A) = 75 × 28
= 2100

$$\text{mean} = \frac{2256}{32} = 70.5$$

∴ total score (B) = 4356 − 2100
= 2256

70.5

(4)

The lowest score in Class A is 39
The range of scores for Class A is 57
The lowest score in Class B is 33
The range of scores for Class B is 60

(b) Find the range of scores for all the students in both classes.

Highest (A) = 39 + 57 = 96

Highest (B) = 33 + 60 = 93

Highest : 96 Lowest : 33

Range = 96 − 33

63

(3)

(Total for Question 3 is 7 marks)