EXAM-STYLE CLASS TEST

MARKS	DURATION	QUESTIONS
39	1 hour	4

Name: ..... Class: .....

Date: .....

MARK ____ / 39

INSTRUCTIONS AND INFORMATION

1. Answer **ALL** the questions in this question paper.
2. Answer QUESTION 1 by **circling** the letter (A–D) in the answer grid at the end of that section.
3. Show **ALL** calculations clearly.
4. Show all units where applicable.
5. Number the answers correctly according to the numbering system used in this question paper.
6. A non-programmable calculator may be used, unless stated otherwise.
7. Write neatly and legibly.

QUESTION 1 [10 MARKS]

Four options are given as possible answers to the following questions. Choose the correct answer and circle the letter (A–D) in the grid at the end of this section. If you want to change your choice, put a cross through the wrong letter and circle your new choice.

1.1 Data collected by the researcher personally is called ... (1)

A) grouped data **B)** biased data
C) primary data **D)** secondary data

1.2 A survey asks only learners leaving the school library about reading habits. The sample is ... (1)

A) too large **B)** biased
C) the whole population **D)** random

1.3 Which one of the following questions is BIASED? (1)

A) How old are you? **B)** What is your favourite subject?
C) How many hours do you read each week? **D)** Do you agree that reading is better than television?

1.4 In a tally table, the group with the most tallies gives the ... (1)

A) mode **B)** range
C) median **D)** mean

1.5 The marks 12 ; 15 ; 18 ; 18 ; 22 have a MODE of ... (1)

A) 17 **B)** 10
C) 85 **D)** 18

1.6 For the same marks, the RANGE is ... (1)

A) 22 **B)** 10

C) 18 **D)** 17

1.7 For the same marks, the MEDIAN is ... (1)

A) 17 **B)** 18

C) 16 **D)** 15

1.8 The whole group being studied is called the ... (1)

A) population **B)** frequency

C) sample **D)** median

1.9 Class intervals in a frequency table should be ... (1)

A) any size at all **B)** at least 10 wide

C) overlapping **D)** the same width and non-overlapping

1.10 An OUTLIER is a value that ... (1)

A) occurs most often **B)** is always the mode

C) lies far from the rest of the data **D)** is exactly in the middle

ANSWER GRID — CIRCLE YOUR ANSWERS FOR QUESTION 1

1.1	A	B	C	D
1.2	A	B	C	D
1.3	A	B	C	D
1.4	A	B	C	D
1.5	A	B	C	D
1.6	A	B	C	D
1.7	A	B	C	D
1.8	A	B	C	D
1.9	A	B	C	D
1.10	A	B	C	D

QUESTION 2 [11 MARKS]

The stem-and-leaf display below shows the marks (out of 80) of the 20 learners in a Grade 8 class.

stem	leaf
2	3 5 8
3	1 4 4 7
4	1 2 5 5 5 8
5	2 3 6
6	1 3 7
7	2

key: 2 | 3 means 23

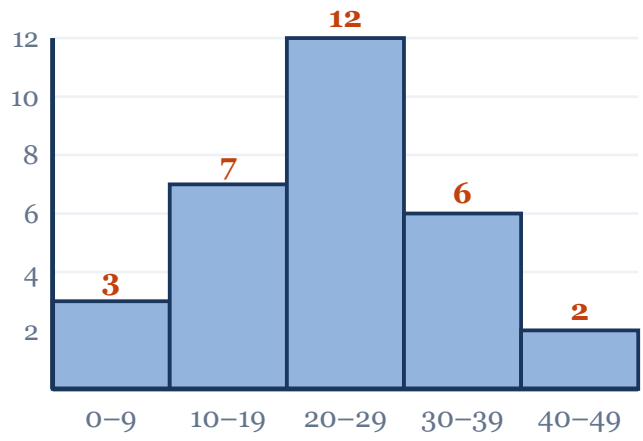
2.1 Write down the modal mark and explain how the display shows you this. (3)

2.2 Determine the median mark. Show how you found it. (4)

2.3 How many learners scored 50 or more? Write this as a percentage of the class. (4)

QUESTION 3 [10 MARKS]

The histogram below shows how long each of 30 learners took to complete a task, in minutes.



3.1 Write down the modal class and give a reason for your answer. (3)

3.2 How many learners took less than 20 minutes? (3)

3.3 What percentage of the learners took 30 minutes or more? Give your answer correct to one decimal place. (4)

QUESTION 4 [8 MARKS]

Answer the following questions about collecting data.

4.1 A learner wants to know the favourite sport of the learners in her school. She asks only the members of her own netball team. Explain why her sample is biased, and describe ONE way she could improve it. **(4)**

4.2 Explain the difference between a POPULATION and a SAMPLE, and give an example of each for the survey above. **(4)**

TOTAL: 39 marks

This question paper consists of 4 questions.

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