GRADE 7 INTEGRATED SCIENCE PRACTICAL

TASK 1: ME (15 MARKS)

Materials Provided

i Metre rule
ii Measuring cylinder
iii Water
iv Wooden block
v Stopwatch
vi Litmus papers
vii Lemon juice
viii Soap solution
ix Vinegar
x Worksheet

Question 1

Measure the length of the wooden block using a metre rule. (2 marks)

Measurement	Answer
Length of block	_____ cm

Question 2

State the SI units for the following quantities: (3 marks)

a) Length _____

b) Mass _____

c) Time _____

Question 3

Classify the following quantities as either **basic** or **derived** quantities. (3 marks)

Quantity	Type
Area	_____
Length	_____
Volume	_____

Question 4

A learner measured 250 mL of water using a measuring cylinder.

a) Convert 250 mL to litres. (2 marks)

b) Name the instrument used to measure the water. (1 mark)

_____

Question 5

Test the substances provided using litmus paper. (4 marks)

Substance	Acid/Base	Indicator Colour Change
Lemon juice		
Soap solution		

TASK 2: (15 MARKS)

Materials Provided

i First aid box
ii Laboratory coat
iii Thermometer
iv Beaker
v Microscope
vi Charts on human reproduction

Question 1

State three laboratory safety rules observed during practical activities. (3 marks)

a) _____

b) _____

c) _____

Question 2

Identify the following laboratory apparatus and state one use of each. (6 marks)

Apparatus	Use
Beaker	
Thermometer	
Microscope	

Question 3

Name the following parts of the human reproductive system: (2 marks)

a) Female reproductive cell _____

b) Male reproductive cell _____

Question 4

State two changes that occur during adolescence. (2 marks)

a) _____

b) _____

Question 5

Why is personal hygiene important during adolescence? (2 marks)

_____

_____

3

Learner's sign: _____.

Guardian's sign: _____.

Date completed: _____.

INTEGRATED SCIENCE PRACTICAL

TASK 1: MEASUREMENTS, SI UNITS, CALCULATIONS AND ACIDS & BASES (15 MARKS)

Question 1

Length of block:
Accept correct measurement depending on the block provided.

(2 marks)

Question 2

a) Length – metre (m)

b) Mass – kilogram (kg)

c) Time – second (s)

(3 marks)

Question 3

Quantity	**Type**
Area	Derived quantity
Length	Basic quantity
Volume	Derived quantity

(3 marks)

Question 4

a) 250 mL = 0.25 litres

b) Measuring cylinder

(3 marks)

Question 5

Substance	**Acid/Base**	**Indicator Colour Change**
Lemon juice	Acid	Blue litmus turns red
Soap solution	Base/Alkali	Red litmus turns blue

(4 marks)

TASK 2: SAFETY, LABORATORY APPARATUS AND HUMAN REPRODUCTION (15 MARKS)

Question 1

Any three:

a) Wear a laboratory coat during experiments.

b) Do not taste chemicals in the laboratory.

c) Report accidents immediately to the teacher.

d) Handle apparatus carefully.

e) Keep the laboratory clean and orderly.

(3 marks)

Question 2

Apparatus	**Use**
Beaker	Holding or mixing liquids
Thermometer	Measuring temperature
Microscope	Viewing very small objects

(6 marks)

Question 3

a) Female reproductive cell – Ovum/Egg cell

b) Male reproductive cell – Sperm cell

(2 marks)

Question 4

Any two:

a) Growth of body hair

b) Deepening of voice in boys

c) Enlargement of breasts in girls

d) Increase in height and weight

(2 marks)

Question 5

Personal hygiene helps to:

- Prevent diseases and infections.
- Keep the body clean and healthy.
- Reduce bad body odour.

(Any one well explained)

(2 marks)

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