



SOUTH AFRICAN COMPREHENSIVE ASSESSMENT INSTITUTE
SUID-AFRIKAANSE KOMPREENSIEWE ASSESSERINGSINSTITUUT

Adult Basic Education and Training (ABET)

Marking Guideline

Natural Science: NQF Level 1

Examination Session: June 2023

Total Marks: 100 marks



Answers**SECTION A****QUESTION 1**

1.1

1.1.1	C ✓✓	(2)
1.1.2	B ✓✓	(2)
1.1.3	B ✓✓	(2)
1.1.4	A ✓✓	(2)
1.1.5	D ✓✓	(2)
1.1.6	C ✓✓	(2)
1.1.7	A ✓✓	(2)
1.1.8	D ✓✓	(2)
1.1.9	A ✓✓	(2)
1.1.10	C ✓✓	(2)

Total Marks for Question 1.1 **[20]**

1.2

1.2.1	False ✓	(1)
1.2.2	True ✓	(1)
1.2.3	True ✓	(1)
1.2.4	True ✓	(1)
1.2.5	False ✓	(1)

Total Marks for Question 1.2 **[5]**



1.3

1.3.1	C ✓	(1)
1.3.2	F ✓	(1)
1.3.3	E ✓	(1)
1.3.4	B ✓	(1)
1.3.5	A ✓	(1)

Total Marks for Question 1.3**[5]****Total for Section A: 30 Marks**

SECTION B**QUESTION 2: LIFE AND LIVING**

2.1.

- 2.1.1 Bacteria ✓✓ (2)
- 2.1.2 The main function is to produce images of the inside of the patient's body. ✓✓ (2)
- 2.1.3
- Night sweats ✓
 - Fever ✓
 - Chest pains ✓
 - Breathing problems
 - Weight loss
 - Loss of appetite
 - Fatigue
 - Chills
- (Any 3) (3)

2.2

- 2.2.1 Bar graph ✓ (1)
- 2.2.2
- Ruler ✓
 - Measuring tape ✓
- 2.2.3 (a) Laundry waste water ✓ (1)
- (b) Rooibos tea/boiled eggs water ✓ (1)

2.3

- 2.3.1 (a) Mouth ✓ (1)
- (b) Stomach ✓ (1)



2.3.2 *Mechanical digestion* uses teeth to physically break down food ✓ (2)
Chemical digestion uses enzymes to break down food ✓

2.3.3 Less than 7 ✓ (1)

Total Marks for Question 2

[17]

QUESTION 3: Energy and Change

3.1

3.1.1 **Figure B** – Wind energy ✓ (2)
Figure C – Hydro/water energy ✓

3.1.2 Coal takes millions of years (many years) to reproduce. ✓✓ (2)

3.1.3 Solar panels ✓ (1)

3.2

3.2.1 (a)  ✓ (1)

(b)  ✓ (1)

3.2.2 The light bulb will shine more bright ✓ due to an increased potential difference (voltage) supplied by the two cells (battery) ✓ (2)

3.2.3 No ✓ (3)

Reason: The light intensity will be less bright ✓ because cells connected in parallel supply a total potential difference equal to a potential difference of just one cell ✓

3.3

3.3.1 • Whatsapp ✓ (1)

- Telegram
- Twitter
- Facebook
- Instagram

(Any 1)

3.3.2 • Broken screen ✓ (2)

- Battery ✓
- Casing
- Charger

(Any 2)

3.3.3 Chemical energy ✓ (1)

3.3.4 • Computer Programming ✓ (2)

- Information Technology (IT) ✓
- Software Developing Engineering
- Telecommunication Engineering

(Any 2 relevant responses)

Total Marks for Question 3

[18]



QUESTION 4: MATTER AND MATERIAL

4.1

4.1.1 Measuring/Graduated cylinders ✓ (1)

4.1.2 Density ✓ (1)

4.1.3 (a) Figure 1: Volume of water = 20mL ✓ (2)

(b) Figure 2: Volume of water = 30mL ✓

4.1.4 Volume of the rock = 30ml – 20mL ✓ (2)

= 10mL ✓ **(Answer only 2 marks)**4.2 Density = $\frac{7.2}{4}$ ✓ **(1 mark for correct substitution)** (2)= 1.8 g/cm³ ✓ **(1 mark for answer and unit)**

4.3

4.3.1 Cow ✓ (1)

4.3.2 • Handbags ✓ (2)

• Belts ✓

• Seat covers

• Gloves

(Any 2 relevant response)

4.3.3 Yes ✓ (3)

Reason: It promotes development of small businesses that may trade with big businesses ✓✓

4.4



4.4.1 Non-natural ✓ (1)

4.4.2 Natural ✓ (1)

4.4.3 Natural ✓ (1)

Total Marks for Question 4 [17]

QUESTION 5: EARTH AND BEYOND

5.1

5.1.1 Natural satellite ✓ (1)

5.1.2 $365\frac{1}{4}$ days ✓✓ (Accept 365 days) (2)

5.1.3

- It assists travellers with directions ✓✓
- It locates the position of a traveller
- It provides an estimated distance and time of travelling
- It provides alternative routes of travelling

(Any 1 relevant response)

5.2

5.2.1 To test the hardness of minerals ✓✓ (2)

5.2.2

- Copper coin ✓
- Nail ✓
- Steel filer ✓

5.2 5.2.3 (a) Talc ✓ (1)



(b) Topaz ✓ (1)

- 5.2.4 • Toothpaste manufacturing/production ✓ (1)
 • Ingredient used in toothpaste (Any 1)

5.3

5.3.1 It is easy to mold ✓ and shape ✓ (2)

- 5.3.2 • Ceramic tiles ✓ (1)
 • Calabush
 • Roof tiles
 • Bricks
 • Cups
 • Plates (Any 1 relevant response)

- 5.3.3 • Ceramic tiles – tiling walls and floors ✓✓ (2)
 • Calabush – decorations/serving traditional beer
 • Roof tiles – roofing of buildings
 • Bricks – building residential and business infrastructure
 • Cups – drinking tea or soup
 • Plates – serving food (Any 1 relevant response)

Total Marks for Question 5

[18]

Total for Section B: 70 Marks

TOTAL MARKS: 100 MARKS

