

**S.M.Z**  
**ZANZIBAR EXAMINATIONS COUNCIL**  
**STANDARD FOUR EXAMINATION**  
**SCIENCE**

123

Time: 1:30 Hours.

**SOLUTIONS**

Year: 2018

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**INSTRUCTIONS TO CANDIDATES**

- 1. This paper consists of TWO (2) sections A and B.**
- 2. Answer ALL questions in section A and B.**
- 3. Cellular phones are not allowed in the examination room.**
- 4. Write your examination number on every page.**
- 5. Write your answers on the space provided.**



SECTION A: (MARKS 40)

Answer ALL questions in this section.

1. Choose the correct answer, then write its letter in the table below the questions.

i. A cleaning tool with a handle

- A. Dustbin
- B. Gloves
- C. Mop
- D. Cloth

The correct answer is C. Mop. A mop is a tool with a handle used to clean floors by wiping dirt and water.

ii. Which of the following diseases is non-communicable?

- A. Diabetes
- B. Cholera
- C. AIDS
- D. Tuberculosis

The correct answer is A. Diabetes. Diabetes is a long-term disease that is not transmitted from one person to another.

iii. Lack of iodine minerals in the body causes

- A. Anaemia
- B. Goitre
- C. Weak bones
- D. Poor eyesight

The correct answer is B. Goitre. Lack of iodine causes swelling of the thyroid gland in the neck.

iv. Polio is a disease caused by

- A. Bacteria
- B. Fungi
- C. Flies
- D. Viruses

The correct answer is D. Viruses. Polio is caused by viruses that affect the nervous system.

v. Which of the following animals are wild?

- A. Goat and cat
- B. Antelope and tortoise
- C. Donkey and cow
- D. Cat and dog

The correct answer is B. Antelope and tortoise. These are wild animals and are not domesticated.

2. Write True or False in the table below.

i. Benefits of forests include obtaining products such as honey and beeswax.

The answer is True. Forests provide products like honey, beeswax, and herbal medicine.

ii. A rainbow occurs when sunlight shines on water droplets found in the atmosphere.

The answer is True. A rainbow forms when sunlight passes through and splits in water droplets.

iii. Sound is produced by objects that are at rest.

The answer is False. Sound is produced due to vibration of objects.

iv. A laboratory thermometer measures temperature between 0°C and 50°C.

The answer is True. A laboratory thermometer measures temperature within that range.

v. A nursery bed is a small area where seeds are planted to obtain seedlings.

The answer is True. A nursery bed is used to raise seedlings before transplanting.

3. Match the descriptions in LIST A with the correct word from LIST B. Write only the letter in the table.

#### LIST A

- i. Area surrounding a magnet
- ii. Similar poles repel each other
- iii. An object that attracts materials of iron origin
- iv. A method of making a magnet
- v. Used to show the magnetic field

#### LIST B

- A. Magnet
- B. Magnetic field
- C. Iron filings
- D. Law of magnetism
- E. Repulsion
- F. Razor blade or nail
- G. Induction
- H. North pole

i. The correct answer is B. Magnetic field. This is the area surrounding a magnet.

ii. The correct answer is E. Repulsion. Similar poles repel each other.

- iii. The correct answer is A. Magnet. A magnet attracts iron materials.
- iv. The correct answer is G. Induction. It is one of the methods of making a magnet.
- v. The correct answer is C. Iron filings. They are used to show the magnetic field.

4. Fill in the blanks using the words in the box below.

(diseases, ammeter, potter, tape, loam, flu, rope, voltmeter, oil)

a) Potential difference is measured using \_\_\_\_\_.

The answer is voltmeter. A voltmeter measures electric potential difference.

b) Length, area, width, and distance are measured using \_\_\_\_\_.

The answer is tape. A measuring tape is used to measure various dimensions.

c) \_\_\_\_\_ soil is a mixture of clay, sand, and humus.

The answer is loam. Loam soil is fertile and good for farming.

d) The harmful effects of insects include causing \_\_\_\_\_ to human beings.

The answer is diseases. Insects transmit diseases to humans.

e) Chickens can spread bird \_\_\_\_\_.

The answer is flu. Chickens can spread bird flu.

### SECTION B: (MARKS 60)

Answer ALL questions in this section.

5. a) What is the importance of air to living things?

Air is important because it is used for breathing. Through air, living things obtain oxygen which helps in the production of energy in the body. Air also helps plants to make food through photosynthesis.

b) Mention two sources of air.

i) Trees. Trees release oxygen into the air.

ii) Oceans. Oceans contribute to fresh air through marine organisms.

c) Write two uses of air.

i) Breathing by humans and animals.

ii) Supporting burning and combustion.

6. a) What is the meaning of a shadow?

A shadow is a dark area formed when light is blocked by a solid object. It appears on the opposite side of the object blocking the light.

b) List two non-natural sources of light.

i) Electric bulb.

ii) Candle.

c) Mention two properties of light.

i) Light travels in a straight line.

ii) Light is reflected when it strikes a smooth surface such as glass.

7. a) What is the meaning of stress?

Stress is a condition in which a person has many worries or emotional pressure that causes mental and physical tiredness.

b) Write two effects of stress.

i) Reduced ability to think properly.

ii) Poor physical health such as headaches.

c) Mention two symptoms of high blood pressure.

i) Frequent headaches.

ii) Dizziness or blurred vision.

8. Complete the table by filling in the missing parts.

a) A drainage channel is used to pass dirty water.

b) A rake is used to collect rubbish.

c) A trench is used to pass dirty water.

d) A container is used to store waste.

e) Paraffin removes bad smell in toilets.

9. Complete the following table by filling in the correct words in the blank spaces.

a) Pemba bat is rare and lives on dry land.

b) Baboon is rare and lives on dry land.

c) Cow is not rare and lives on dry land.

d) Tortoise is not rare and lives in the sea.

e) Dolphin is rare and lives in the sea.

10.a) Fill in the parts of the plant shown by numbers.

1. Flower

2. Stem

3. Roots

4. Leaf

5. Fruit

b) Mention one function of each part listed above.

1. Roots hold the plant firmly in the soil.
2. The stem transports water and food.
3. Leaves make food.
4. The flower produces seeds.
5. The fruit protects and disperses seeds.