



Third Term Test - Grade 08 - 2023  
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SCIENCE

Time: 2 hrs

Name / Index No:

- Answer all the questions.
- Select and underline the most suitable answer.

PART - I

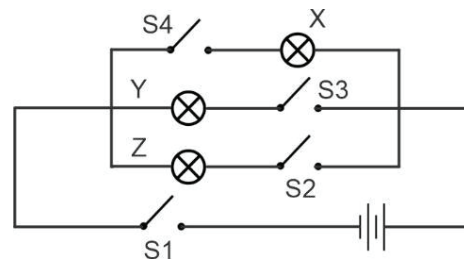
- The internal factors used in photosynthesis in green plants are,
  - 1 - Carbon dioxide
  - 2 - water
  - 3 - Chlorophyll
  - 4 - Light energy
- Consider the following living characteristics
  - a. Bilateral symmetry.
  - b. Slender elongated worm-like body.
  - c. Segmented body.The group of animals belonging to these characteristics are,
  - 1 - Arthropoda
  - 2 - Annelida
  - 3 - Mollusca
  - 4 - Cnidaria
- What is the name given to the change caused by the growth of microorganisms on food rich in protein?
  - 1 - Putrefaction
  - 2 - Rotting
  - 3 - Fermentation
  - 4 - Rancidity
- A part is **not** a part of the human brain
  - 1 - Cerebrum
  - 2 - Cerebellum
  - 3 - Spinal cord
  - 4 - Medulla oblongata
- The part of human skin made up of non-living cells is,
  - 1 - Sebaceous Gland
  - 2 - Epidermis
  - 3 - Dermis
  - 4 - Sweat gland

6. Mass, electric current, electrical resistance are measured in a unit respectively by,

- 1 - kilogram, ampere, ohm
- 2 - newton, milliampere, ohm
- 3 - newton, ampere, ohm
- 4 - kilogram, volt, ohm

7. The switches to be closed (ON) to light bulb Z are,

- 1 - S1 and S3
- 2 - S1 and S2
- 3 - S2 and S3
- 4 - S2 and S4



8. Among the following materials, brittle material is,

- 1 - lead
- 2 - copper
- 3 - sulphur
- 4 - iron

9. What is the correct statement about the boiling point of a substance?

- 1 - A solid turns into a liquid at boiling point
- 2 - The boiling point of the distilled water at the top of the hill is more than Celsius 100.
- 3 - A liquid turns into a gas at boiling point.
- 4 - When the atmospheric pressure increases, the boiling point decreases.

10. An example of a physical change

- 1 - rusting of iron
- 2 - lighting a firecracker
- 3 - burning a paper
- 4 - Evaporation of liquid wax

11. Can be used as magnetic material to make magnets

- 1 - Perspex rod
- 2 - Ferrite rod
- 3 - Aluminum rod
- 4 - Asbestos rods

12. An animal showing incomplete metamorphosis is,

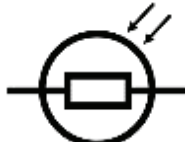
- 1 - mosquito
- 2 - cockroach
- 3 - house fly
- 4 - fruit fly

13. The answer which correctly shows the circuit symbol for an LED is,

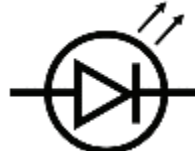
1-



2-



3-



4-



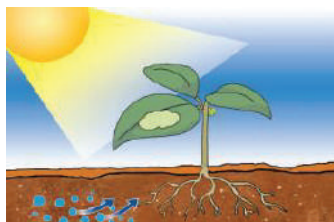
14. An organism that does not show morphological changes in the stages of its life cycle is
- 1 - squirrel
  - 2 - frog
  - 3 - mosquito
  - 4 - house fly
15. The star that appears to be stationary in the night sky from east to west is,
- 1 - Alpha Centauri
  - 2 - Polaris
  - 3 - Pollux
  - 4 - Regulus
16. Select the answer that correctly indicates the function performed by the following parts of the central nervous system
- 1 - Spinal cord – Controls higher mental functions
  - 2 - Cerebrum - Controls heart beat rate
  - 3 - Cerebellum - Controls the balance of the body
  - 4 - Spinal cord – Controls of voluntary actions
17. The factor that does not affect the resistance of a conductor is,
- 1 - Length of the conductor
  - 2 - Cross-sectional area of the conductor
  - 3 - Surface nature of the conductor
  - 4 - The material the conductor is made of
18. Not a function performed by underground trunks is,
- 1 - Spending dormant periode
  - 2 - Food storage
  - 3 - Vegetative propagation
  - 4 - Photosynthesis
19. Select the correct option about the frequency of sound emitted by a device which vibrating a string,
- 1 - When the tension increases, the frequency decreases.
  - 2 - When the thickness increases, the frequency increases.
  - 3 - When the length increases, the frequency increases.
  - 4 - When the thickness decreases, the frequency increases.
20. It is not a disease that is often seen during the rainy season
- 1 - Hydrophobia
  - 2 - Diarrhea
  - 3 - Dengue
  - 4 - Leptospirosis

## PART - II

### Instructions

- Answer the first question and 4 more questions
- Also use separate paper for writing answers
- The first question carries 16 marks and the other questions carry 11 marks each.

1. A. Below are the diagrams of several biological processes of plants, which are considered as a major organism that contributes to the safety of the environment.



A



B



C

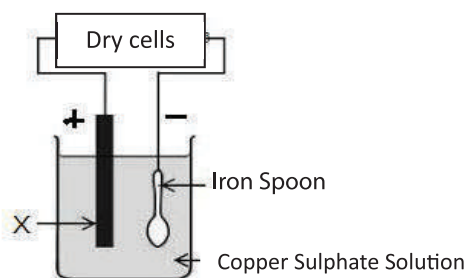


D

- Name the biological processes represented by A, B, C, D (4 marks)
- Write the process A in a word equation (2 marks)
- Write two differences between C and D processes (2 marks)

B. The picture below shows a practical use of the chemical effect of electricity in day to day life.

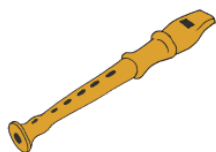
- Write two other effects of electricity besides chemical effect (2 marks)
- Write the name of the metal named X (1 mark)
- What is the change that happens on the spoon of the setup? (1 mark)



C. Diagrams of three musical instruments are shown below.



X



Y



Z

- Which part of the X, Y and Z need to vibrate to produce sound? (3 marks)
- What is the frequency range of sound that can be heard by human? (1 mark)

(Total 16 marks)

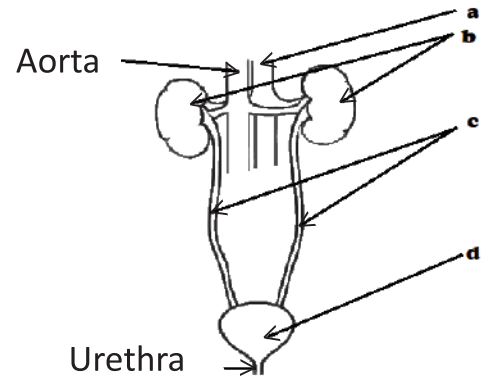
2. Below is a diagram of the human urinary system.

I. Name the a, b, c, d parts of the diagram (2 marks)

II. What is the excretion? (2 marks)

III. Fill in the blanks corresponding to the w, x, y, z positions in the table below

( $\frac{1}{2} \times 4 = 2$  marks)



| Excretory organ | Excretory substance | How to release |
|-----------------|---------------------|----------------|
| W.....          | Urea, Salts, Water  | Urine          |
| Lungs           | X.....              | Exhalation     |
| Skin            | Y.....              | Z.....         |

IV. What is the salt causes the formation of urinary stones? (1 mark)

V. Write down any two common diseases related to urogenital system (2 marks)

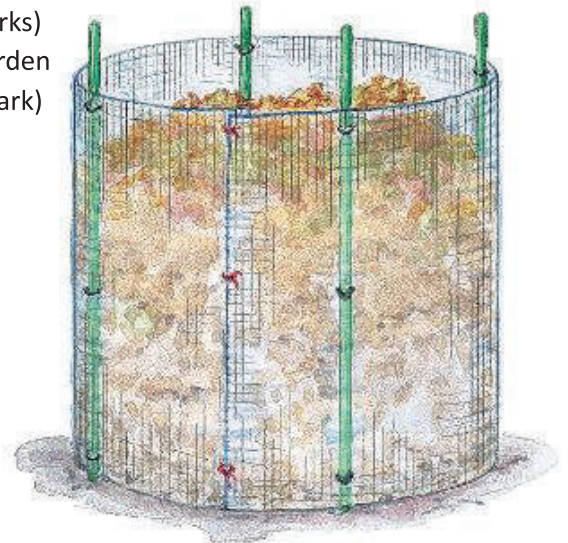
VI. Write down two precautionary measures that can be taken to maintain a healthy urinary system (2 marks)  
(Total 11 marks)

3. A. A group of grade 8 students constructed a compost cell in the backyard of the laboratory is shown below.

I. Define the term micro-organisms (2 marks)

II. Write two possible microbial components in this cell (2 marks)

III. Write two materials that can be collected from the school garden in the corresponding cell ( $\frac{1}{2} \times 2 = 1$  mark)



B. Food spoilage due to microorganisms and other factors is a disadvantage.

I. Write down two factors affecting food spoilage other than micro-organisms (2 marks)

II. What is preservation of food? (2 marks)

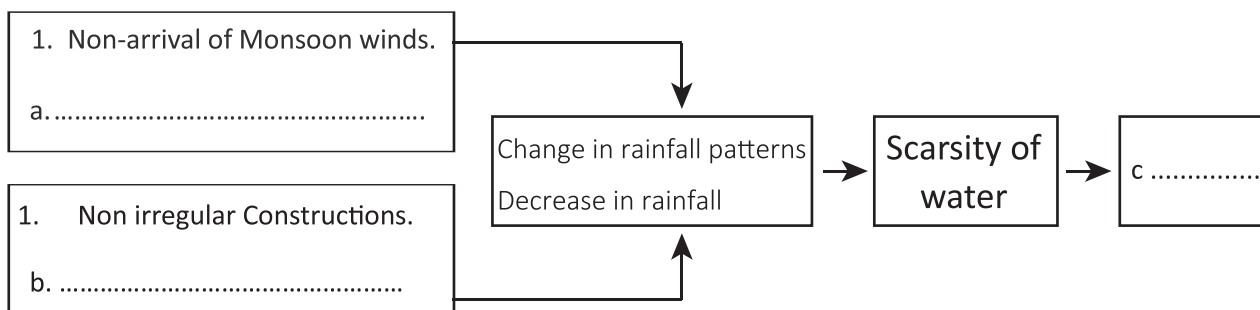
III. Mention two traditional methods used for food preservation (2 marks)

(Total 11 marks)

4. A. Natural disasters affecting people's daily life. Below is a concept map describing such a disaster.

I. Fill the blanks a, b, c

(3 marks)

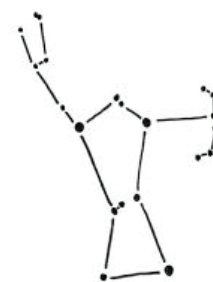


II. Write two other natural disasters affecting Sri Lanka

(2 marks)

B. Direction identification can be done by observing the constellations in the night sky.

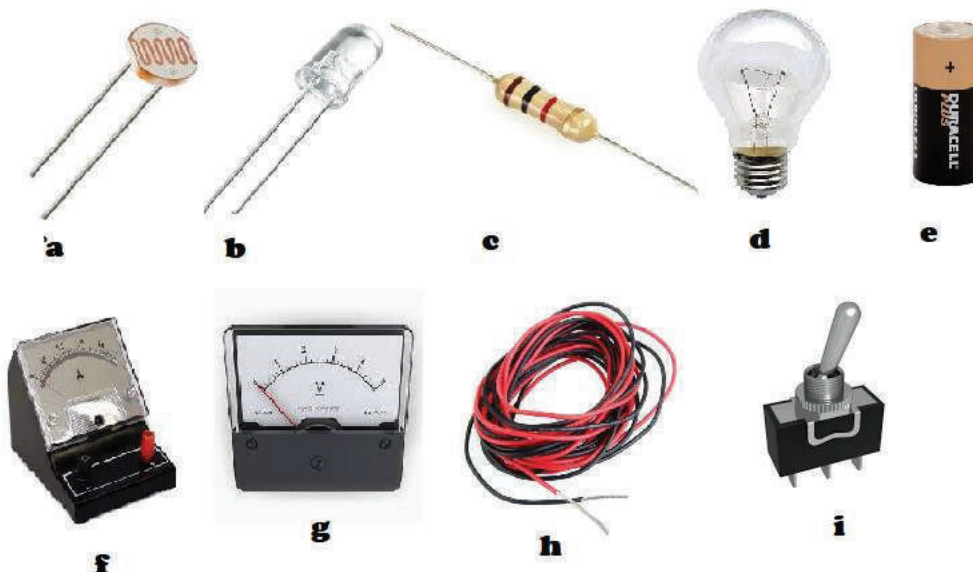
Below is such a constellation.



- I. What is the constellation shown in the diagram? (1 mark)
- II. What direction does identify on Earth using this constellation? (1 mark)
- III. What is the difference between a star and a planet? (1 mark)
- IV. What is the unit of measuring distance between stars? (1 mark)
- V. Name the brightest star in the night sky and the constellation it belongs to. (2 marks)

(Total 11 marks)

5. Below is a diagram of some devices and equipment used by a group of grade 8 students in a group activity.



- I. Name a, b, c, f ( $\frac{1}{2} \times 4 = 2$  marks)
- II. Draw the circuit to be designed to light a bulb using d, e, h, f, i devices using standard symbols (4 marks)
- III. What is the purpose of using the above circuit? (1 mark)
- IV. Select the appropriate instrument to measure the potential difference between the two ends of the bulb and draw it using the corresponding symbols in the above circuit diagram (1 mark)
- V. What is electric current? (1 mark)
- VI. What is the standard direction of electric current? (1 mark)
- VII. Write down an adverse effect of unregulated disposal of electronic waste into the natural environment (1 mark)

(Total 11 marks)

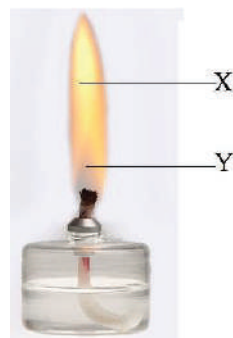
6. A. Below is a chart prepared based on the factors affecting the occurrence of a fire.

- I. What is the name of the figure? (1 mark)
- II. Write suitable factors for **a** and **b** in the diagram (2 marks)
- III. What is a Fuel? (2 marks)



B. A lamp flame is shown in the diagram.

- I. Name the regions X and Y in the diagram (2 marks)
- II. Write down the energy transformation that takes place in the combustion process of the lamp (1 mark)
- III. What kind of combustion takes place in the flame of the lamp? (1 mark)
- IV. Why water is used to extinguish the fire caused by inverting the lamp? (2 marks)



(Total 11 marks)

7. A. Write the scientific meaning / term that matches the following definitions.

| Definition                                                                                                          | Scientific Term |
|---------------------------------------------------------------------------------------------------------------------|-----------------|
| i. Roots absorb water from the atmosphere                                                                           |                 |
| ii. Discharges starting from a cloud and ending at the Earth                                                        |                 |
| iii. Organisms that maintain their body temperature unchanged despite changes in the temperature of the environment |                 |
| iv. The mass of a unit volume of a substance                                                                        |                 |
| v. The path a planet takes around the Sun                                                                           |                 |
| vi. The area around the magnet which the magnetism is spreaded out                                                  |                 |

(1 x 6 = 6 marks)

B. Answer the following questions based on the material given below

Pins, A piece of Styrofoam, A glass stick, A plastic pen lid, A pencil rod, A Blade.

- I. Draw and name a suitable diagram to distinguish conductors and insulators from the above materials (2 marks)
- II. Classify the above materials as conductors and insulators ( $\frac{1}{2} \times 6 = 3$  marks)

(Total 11 marks)