Minuwangoda Education Zone

Second Term Test - 2025

Grade 7

Science

Name : …….. Time - 2 hours

Part I

* **Answer all the questions.**
* **Underline the most suitable answers.**

1) After pollination which part of a flower becomes a fruit?
   (i) Anther
   (ii) Pollen
   (iii) Ovary
   (iv) Stigma

2) The answer contains only monocotyledonous plants
   (i) Bean, long bean, peanuts
   (ii) coconut, corn, paddy
   (iii) coconut, arecanut, beans
   (iv) paddy, bean, coconut

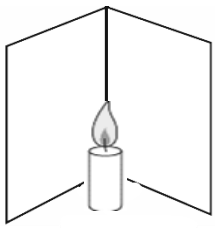
3) The answer that shows an acid and a base that can be used at home is given respectively in,
   (i) Vinegar, soap water
   (ii) Soap water, Ash solution
   (iii) lime juice, soap water
   (iv) soap water, vinegar

4) The international unit of measuring energy is
   (i) Walt (ii) Farad (iii) Ohm (iv) Joule

5) Select the answer only with vertebrates
   (i) Cockroach, Scorpion
   (ii) Cobra, Kingfisher
   (iii) Leech, turtle
   (iv) Hawk, Scorpion

6) Which of the following solutions turns pink when phenolphthalein is added?
   (i) Dilute sulphuric acid
   (ii) Sodium hydroxide
   (iii) Sodium chloride solution
   (iv) Dilute hydrochloric acid

7) If two plane mirrors are placed at an angle of 60^0 as shown in the figure and the torch is lit in front of it, the number of images given is,
   (i) Two
   (ii) Three
   (iii) Four
   (iv) Five



8) The organization of parts for the formation of organism can be correctly given as,
   (i) cells ⟶ organs ⟶ tissues ⟶ systems ⟶ organisms
   (ii) cells ⟶ tissues ⟶ organs ⟶ systems ⟶ organisms
   (iii) cells ⟶ systems ⟶ tissues ⟶ organs ⟶ organisms
   (iv) organisms ⟶ systems ⟶ organs ⟶ tissues ⟶ cells

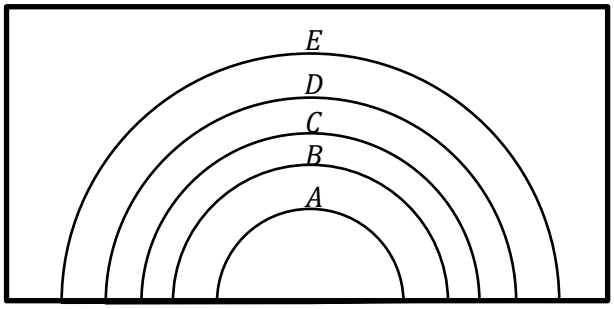
9) The tectonic plate which Sri Lanka belongs is

(i) North American tectonic plate
(ii) The south American tectonic plate
(iii) Pacific tectonic plate
(iv) Australian Indian tectonic plate

10) What is the common structure of the human digestive system and respiratory system?

(i) Larynx
(ii) Trachea
(iii) Pharynx
(iv) oesophayus

- **Answer the equations 11 and 12 using the figure.**



Layers of the atmosphere

11) The five main layers of the atmosphere are shown as A, B, C, D, E. What is the letter represents the mesosphere of the atmosphere?

(i) A (ii) B (iii) C (iv) D

12) The letter in which the ozone layer is located and its name is correctly indicated

(i) A – Troposphere
(ii) B – Thermosphere
(iii) B – Stratosphere
(iv) C – Mesosphere

13) The respiration process of living organisms is shown in the equation below.

Simple food + A ⟶ Energy + B + Water vapour

Choose the appropriate answer for the blanks

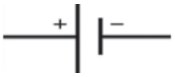
(i) A Carbon dioxide B Oxygen
(ii) A Oxygen B Carbon dioxide
(iii) A Glucose B Carbon dioxide
(iv) A Glucose B Oxygen

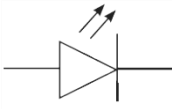
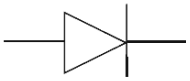
14) Select the correct statement/ statements

(A) Sound travel through a vaccum
(B) Sound travel through air
(C) Medium is necessary for the propagation of sound
(D) The speed of sound in air is greater than the speed of light in air.

(i) A and B
(ii) B and C
(iii) A and C
(iv) A, B and D

15) The symbol for light emitting diode is

(i) 

(ii) 
(iii) 
(iv) 

16) What is the answer that indicates the type and the number of mirrors needed to make a kaleidoscope
(i) Convex mirrors - 3
(ii) Concave mirrors - 3
(iii) Plane mirrors - 3
(iv) Concave mirrors - 2 and Convex mirrors- 1

17) The longest organ in the digestive system is,
(i) Oesophagus
(ii) Small intestine
(iii) Large intestine
(iv) Rectum

18) The main gas that causes acid rain is
(i) Sulfur dioxide
(ii) Carbon dioxide
(iii) Nitrogen
(iv) Methane

19) The device that converts chemical energy to electrical energy is
(i) Turbine
(ii) Electric bell
(iii) Dynamo
(iv) Drycell

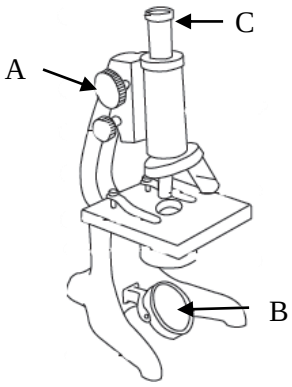
20) The plant that has leaves with a reticulate venation
(i) Orange (ii) Corn (iii) Coconut (iv) paddy

Part *II*

- **Answer the first question and four other question.**

(1)

(i)



(a) Name the parts of A, B, C and write their functions in front of each. (6 marks)

	Part	Function
A		
B		
C		

(b) What type of lens is used in C? (1 mark)

……..

(ii) Identify and name the device (1 mark)

……

(iii) Write its function (1 mark)

……

(iv)

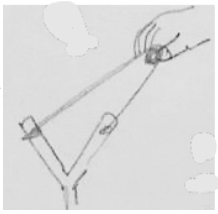
(a) Identify and name the device (1 mark)

……

(b) Name an occasion when this is used (1 mark)

……

(v) What is the form of energy stored in the device shown in the figure? (2 marks)



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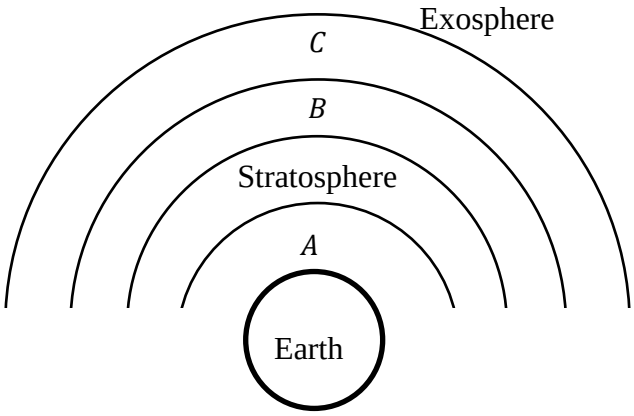
(vi) Write the energy transformation that occurs when this is operated. (2 marks)

……

(2) The following is a diagram showing the layers of the earth's atmosphere.



(i) Name the layers A, B, C in the diagram above. (3 marks)

(ii) Among the above what is the name of the layer that contains the largest volume of air? (1 mark)

(iii) Write an importance of the layer A to living things. (1 mark)

(iv) In which sphere the ozone layer is located? (1 mark)

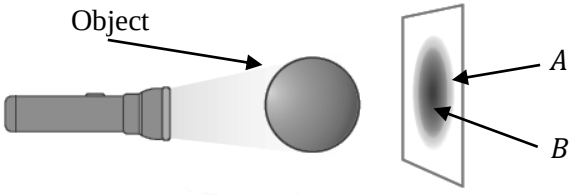
(v) Which is the coldest layer among the above layers? (1 mark)

(vi) "As you go up in the stratosphere the temperature gradually increases." What is the reason for that? (1 mark)

(vii) Name the layer in which jets and plane travels? (1 mark)

(viii) Name two particulate pollutants that cause air pollution (1 mark)

(3) The following is a diagram of an activity carried out by students to obtain umbra/shadow.

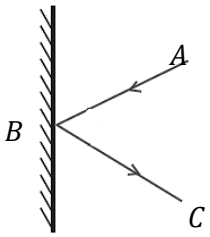


(i) Name the parts A and B of the above shadow. (2 marks)

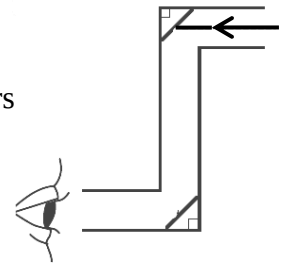
(ii) What characteristic should the above object have to obtain an umbra/shadow? (1 mark)

(iii) What changes occur in the umbra/shadow when the light source is moved away from the object? (1 mark)

(iv) The following is the way in which a ray of light incident on a plane mirror is reflected. Name the ray A and B (2 marks)



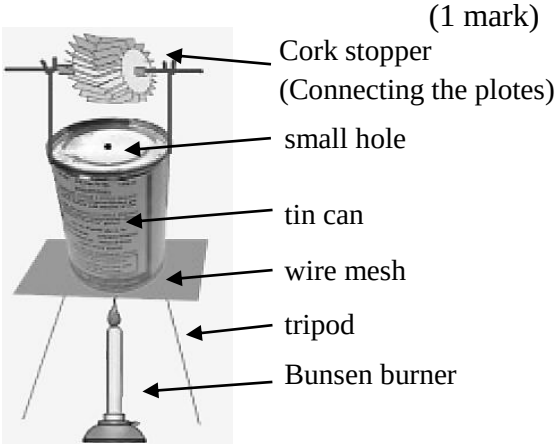
(v) The diagram below shows a device made using two plane mirrors (2 marks)
Complete ray diagram



(vi) What is the name of this device (1 mark)

(vii) Name an occasion when it is used (1 mark)

(4) (*A*) Given below is a device designed to demonstrate an instance of using the energy of heat.



(i) What is the energy? (1 mark)

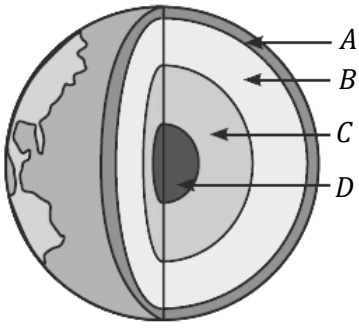
(ii) Write two types of energy that you know (1 mark)

(iii) Write an observation that can be seen in the activity (1 mark)

(iv) Write the energy transformation that occurs in this activity (2 marks)

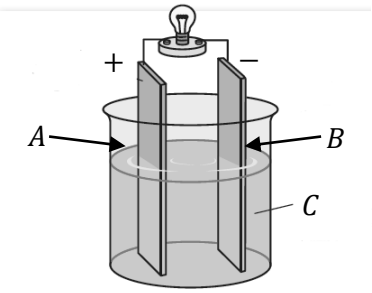
(v) What acts as a source of energy when the device is operating? (1 mark)

(*B*) Below is a diagram depicting the details of the interior of the earth.



(i) Name the layers A, B, C, D (2 marks)
(ii) Name the elements that are most abundant in the crust (1 mark)
(iii) What happens when an earthquake occurs? (1 mark)

(5) A diagram of a chemical cell used as an electric source in the laboratory is shown below.



(i) Name the metal plates A and B (2 marks)
(ii) What is the solution used in the beaker? (1 mark)
(iii) Write the energy transformation that occurs here? (2 marks)
(iv) Write two observations that are observed when the chemical cell is in operation (2 marks)
(v) What is the principle that causes the generation of electrical energy in a dynamo? (1 mark)
(vi) When a dynamo generates electricity, in which parts does rotation occurs? (2 marks)

Total 10

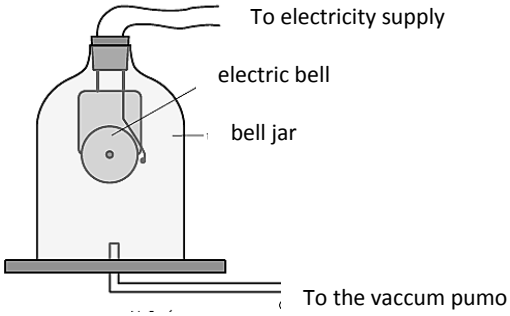
(6) Some of the materials used in the laboratory are given below.

1.Vinegar 2. Sodium hydroxide
3. Sodium Chloride 4. Phenolpthalein
5. Distilled water 6. Baking powder
7. Milk of magnesia 8. Shoe flower boiled water
9. Tumatic boiled water

(i) Select and write an alkaline/ basic substance (2 marks)
(ii) Select and write the substance that turn P^H papers to red. (1 marks)
(iii) Write its P^H range (2 marks)
(iv) What are the neudral substance? (2 marks)
(v) Which substance is given as the treatment for gastritis? (1 mark)
(vi) Name two indicators made from natural substances? (2 marks)

(7) (*A*) A child observing the sky on a rainy day observed that the light produced by a lightning stick appeard fist and the sound of lightning was head later.

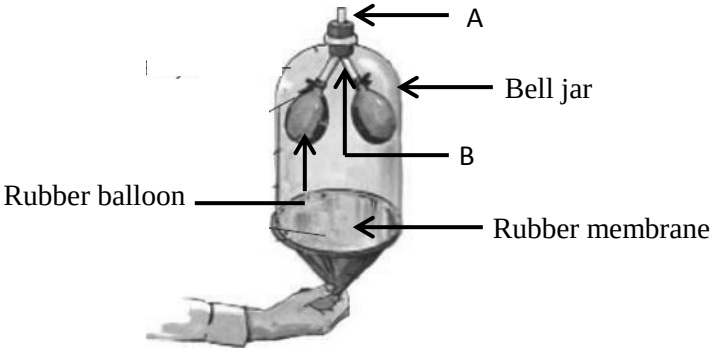
(i) What could be the reason for the above observation?
(ii) A group of grade 7 students conducted a simple experiment to show that a medium is required for the transmission of sound. What are its observation?



(iii) Arrange the following in ascending order according to their speed of transmission of sound through solid, liquid and gas (1 mark)

(iv) Give an example for the above answer in (iii) (1 mark)

(*B*)



(i) Which process of the human body is demonstrated by the model shown in the above diagram? (1 mark)

(ii) Define that process (1 mark)

(iii) What are the corresponding structures of the human body depicted by A and B above? (1 mark)

A -

B -

(iv) What observations can we make when the model is in operation? (1 mark)