



Negombo Education Zone

Second Term Evaluation - 2025

Science

Name:..... Index number:.....

Grade 07

Paper I & II

Time 02 Hours

Instructions:

- Answer all the questions.
- For questions 1 to 20 select the most appropriate answer and underline.

01. Which of the following is an aquatic flowering plant?

- i. Salvinia ii. Moss iii. Water Lily iv. Koodalu

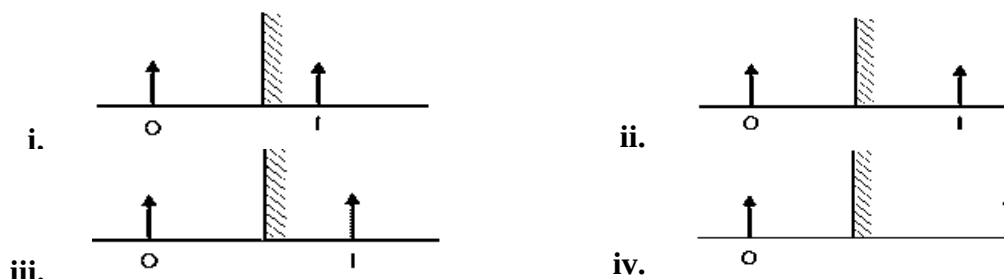
02. What is the maximum resolution power of the naked eye?

- i. 0.1 μm ii. 0.1 mm iii. 0.2 μm iv. 0.2 mm

03. Select the correct option regarding the speed of sound as it travels through different media.

- i. Gas < Solid < Liquid ii. Liquid < Gas < Solid
iii. Gas < Liquid < Solid iv. Gas < Solid < Liquid

04. Identify the correct location of the image formed by a plane mirror when an object is placed in front of it.



05. A pH paper was dipped into a solution X and the pH value was 10. What is the most likely solution X?

- i. Lime Juice ii. Lime water iii. Water iv. Salt solution

06. Select the pair of devices where electrical energy is converted into Kinetic energy.

- i. Electric motor and Electric Fan ii. Toy Car and Radio
iii. Electric bulb and Dynamo iv. Solar panel and Electric Bell

07. In which layer of the atmosphere do ice clouds form?

- i. Troposphere ii. Stratosphere iii. Thermosphere iv. Mesosphere

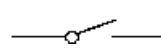
08. In a microscopic observation, if the magnification of the objective lens is 40x and the eyepiece is 20x, what is the total magnification?

- i. 800x ii. 400x iii. 20x iv. 2x

09. An adaptation of animals that has been used in the design of airplanes and jets is,

- i. Camouflage ii. Adaptation iii. Streamlined Shape iv. Body Colour

10. Select the correct symbol for the device that can store electric charges.

- i.  ii.  iii.  iv. 

11. Among the following statements, the true statement is,

A. Our voice is produced by the vibration of the tongue.

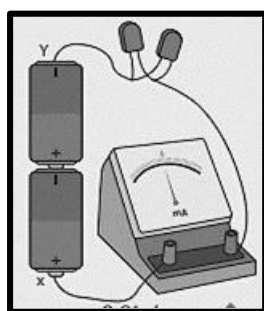
B. The guitar is a musical instrument that produces sound by vibrating strings.

- i. Only A is true ii. Only B is true iii. Both A and B are true iv. Neither A and B is true

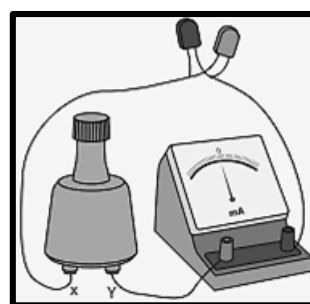
12. Which of the following properties of water makes it possible to produce saline solutions and vaccines in healthcare?

- i. Solvent Property ii. Medium for life iii. Cooling agent property iv. As an insulator

13. Two setups are shown below, where two LED bulbs with opposite (+) and (–) terminals are connected to two dry cells and a dynamo. Based on these setups, which of the following observations is most accurate?



1st Instance



2nd Instance

- i. In both cases, the two LED bulbs light up in the same way.
ii. Only the LED bulbs connected to the dry cells light up.
iii. Only one of the two LED bulbs connected to the dry cells lights up, while the LED bulbs connected to the dynamo light up alternately.
iv. The LED bulbs connected to the dynamo light up continuously.

14. Liquid Iron and nickel are abundant in the:

- i. Core ii. Crust iii. Mantle iv. Lithosphere

15. The tissue responsible to transport water and mineral through the plant body is?

- i. Xylem ii. Phloem iii. Cortex iv. Pith

16. Which of the following correctly describes the type of leaves of papaya, cassava, and curry leaves?



- i. Simple leaves divided into halves – papaya and cassava
ii. Compound leaves – curry leaves and papaya
iii. Composite leaves – papaya and cassava
iv. Simple leaves – curry leaves and cassava

17. If the number of images formed when an object is placed between two plane mirrors is five, what is the angle between the mirrors?
- i. 30° ii. 45° iii. 60° iv. 90°
18. Which of the following correctly describes the generation of electricity in a conductor when magnetic field lines intersect it?
- i. Electromotive force ii. Electromagnetic induction
iii. Induced electromotive force iv. Electric potential difference
19. Which of the following is a characteristic that **cannot be** used in a dichotomous classification key?
- i. Can fly / Cannot fly ii. Has legs / Has no legs
iii. Has a tail / Has no tail iv. Has wings / Has no wings
20. Your friend says that a yellow turmeric stain on a white garment turned red after washing with soap. What is the most accurate scientific explanation for this observation?
- i. The stain was originally red.
ii. A red-colored soap was used.
iii. The yellow turmeric reacted with soap to form a red-colored substance.
iv. Since soap is basic (alkaline), the turmeric acted as a natural indicator and turned red.

Part II

Instructions:

- Answer 5 questions **including the first question**.

01.

A. Below is a diagram of an activity you did related to the sound lesson.

i. What do you observe in the following cases? (2 Marks)

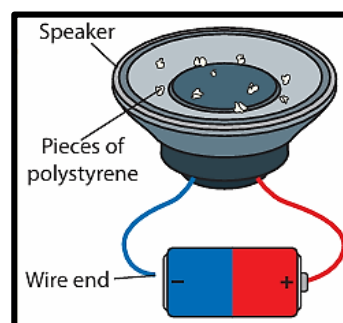
When the speaker is on	a)
When the speaker is not working	b)

ii. What is the reason for your observations? (1 Mark)

B. The figure below shows a cross-section of a boiled egg.

i. Write your answer by comparing the interior of the Earth with the parts of the egg. (3 Marks)

Part of the Egg	Corresponding Part of the Earth's Interior
Egg yolk	a)
Egg white	b)
Egg shell	c)



C. During a laboratory activity, a group of students used indicators to identify acidic, basic, and neutral substances. The colors observed with each solution when tested with different indicators are shown in the table below.

Solution \ Indicator	A	B	C
Phenolphthalein	Colourless	Pink	Colourless
Methyl Orange	Red	Yellow	Yellow
Red Litmus	Red	Blue	Red

- i. Based on the above observations,
 - a) Identify the acidic solution.
 - b) Identify the basic (alkaline) solution.
 - c) Identify the neutral solution. **(3 Marks)**
- ii. What is the color of pH paper which used as an indicator in the laboratory? **(1 Mark)**
- iii. Name:
 - a) One acid commonly found in the laboratory
 - b) One base commonly found in the laboratory **(2 Marks)**

D. In everyday life, electricity is used to perform various tasks. A simple cell and a dynamo are two sources that can be used to generate electricity.

- i. Name the types of electric current produced by:
 - a) a simple cell
 - b) a dynamo **(2 Marks)**
- ii. What is the difference between the two types of current mentioned above? **(2 Marks)**

(Total Marks: 16)

02. Flowering plants show a great diversity in size and external characteristics. However, all flowering plants share a few common parts.

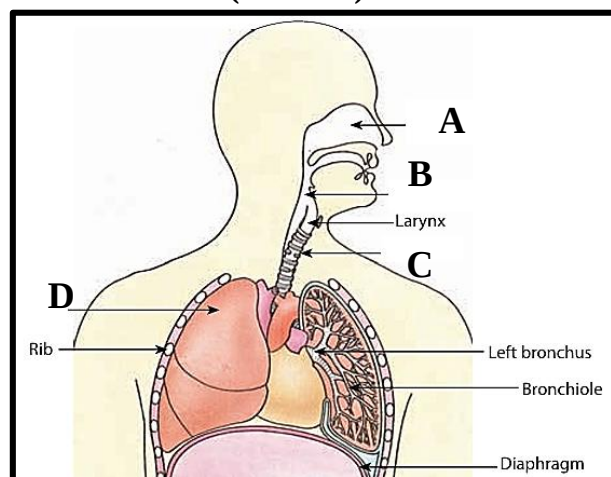
A. Several main parts of flowering plants are listed below. Use your knowledge to answer the following questions.

Plant Leaves, Flowers, Stems, Roots

- i. From the list above, select and write the plant part that performs each of the following functions.
 - a) Absorbs water and dissolved mineral needed by the plant
 - b) Produces food through photosynthesis
 - c) Transports water and food throughout the plant
 - d) Helps in the formation of fruits **(2 Marks)**
- ii. Draw and label a diagram of the parts of the gynoecium of a flower. **(3 Marks)**
- iii. Flowering plants can be divided into two groups: monocotyledons and dicotyledons. State two differences between these two types of plants. **(2 Marks)**
- iv. Name a flower that contains nectar. **(1 Mark)**

B. A diagram of the respiratory system is shown below.

- i. Name the parts labeled A, B, C, and D. **(2 Marks)**
- ii. State the function of part D. **(1 Mark)**



(Total Marks: 11)

03. State whether the following statements are correct "✓" or incorrect "X" by placing the respective symbol in front of each statement.

- i. The number of times a specimen appears magnified under a microscope is referred to as resolution. ()
- ii. The eye piece of a compound microscope is closest to the specimen. ()
- iii. The dolphin, which moves using flippers, is a fish that lives in the sea. ()
- iv. Air undergoes filtration in the nasal cavity. ()
- v. Neutral substances turn red litmus paper blue. ()
- vi. Simple cells are made using metals like zinc and copper. ()

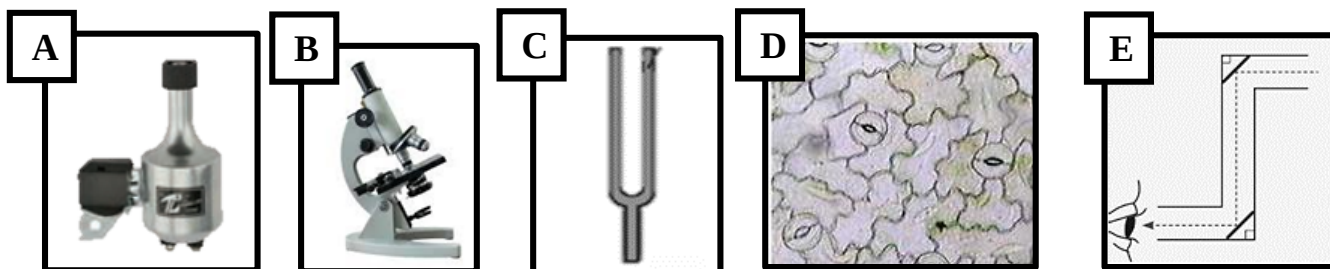
- vii. Used chemical cells are harmful to the environment. ()
- viii. A medium is not necessary for sound transmission. ()
- ix. The ozone layer protects the Earth and its living organisms from harmful ultraviolet rays. ()
- x. Streamlined shape is important for movement in water. ()
- xi. Stilt roots can be seen in Pandanus (Wetakeyiya). ()

04. (Total Marks: 11)

A. Choose the correct word from the brackets and fill in the blanks below.

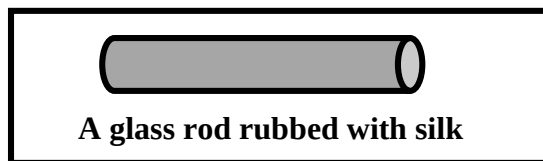
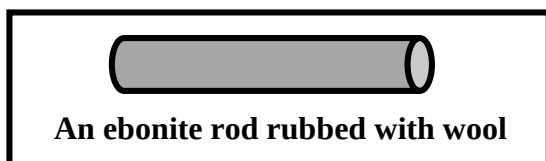
- i. The mirror used as a side mirror in vehicles is a _____ (convex mirror / concave mirror).
- ii. An image that cannot be captured on a screen is called a _____ (real image / virtual image).
- iii. A _____ (reflection / eclipse) occurs due to the formation of a shadow.
- iv. An inverted image can be obtained using a _____ (convex / concave) mirror.
- v. The convergence of a parallel beam of light at a single point in front of a mirror is called _____ (convergence / divergence).
- vi. In a plane mirror, the left and right sides of the object appear swapped. This is called _____ (reflection / lateral inversion). **(6 Marks)**

B. Identify the diagrams shown and name them. **(5 Marks)**



05. (Total Marks: 11)

A. Some materials become electrically charged when rubbed. The electric charges that develop on materials due to rubbing are known as static electric charges. Consider the following activity related to static electricity and answer the questions below.



- i. What type of static electric charge is gained by the glass rod rubbed with silk? **(1 Mark)**
- ii. What type of static electric charge is gained by the ebonite rod rubbed with wool? **(1 Mark)**
- iii. When a glass rod rubbed against a silk is brought near an ebonite rod rubbed with wool, what is observed? **(2 Marks)**
- iv. Name two devices that use static electricity. **(2 Marks)**

B. Fill in the blanks by choosing the correct answers from the brackets. **(5 Marks)**

(Sucrose, Sodium Chloride, Sweet toddy, Cooling properties, Chemical reactions)

The most abundant salt in seawater is **i.** _____. Water can reduce the heat of an object by absorbing heat. This is known as the **ii.** _____ of water. Many **iii.** _____ that occur in the human body take place in an aqueous medium. The sugar dissolved in sugarcane juice is **iv.** _____. The sugar solution obtained from the flower of the coconut plant is called **v.** _____.
(Total Marks: 11)

06.

A. Studying each animal individually is difficult, so they are classified based on their common characteristics.

- i.** Name the two main categories used to classify animals. (1 Mark)
- ii.** Group the following animals under the two categories you mentioned above. (3 Marks)



Prawns



Leopard



Elephant



Butterfly



Turtle



Snail

- iii.** What is the term used to describe the adaptation of animals to the color of their environment? (1 Mark)
- iv.** Write one benefit animals gain by adapting well to their environment. (1 Mark)
- v.** From the above animals, select and write the name of one animal that shows the type of adaptation you mentioned in (iii). (1 Mark)

B. Write the energy transformation that occurs in the following situations. (4 Marks)

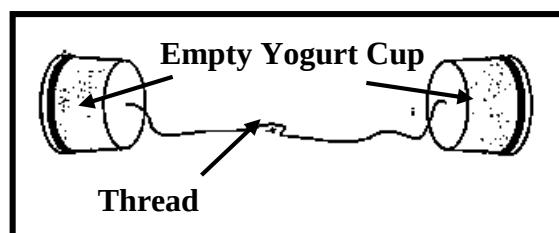
- i.** When generating electricity using wind
- ii.** When sound is produced by a radio
- iii.** When generating electricity using a solar cell
- iv.** When generating electricity using a dry cell

(Total Marks: 11)

07.

A. You have studied at school that sound can travel through different media.

- i.** What phenomenon is modeled by the setup shown here? (1 Mark)
- ii.** Write two conditions necessary to make this activity more successful. (2 Marks)
- iii.** Which structure of the human body is essential for this activity? (1 Mark)
- iv.** To which level of biological organization does the structure you mentioned above belong? (1 Mark)



B. Based on the model that represents the layers of the atmosphere, answer the following questions.

- i.** Name the parts labeled **W** to **Z**. (2 Marks)
- ii.** Write two benefits of the atmosphere to living organisms, including humans. (2 Marks)
- iii.** In order to obtain an annual revenue license for vehicles, an emission certificate must be obtained.
 - a.** Name two gases that may be mentioned in this certificate. (1 Mark)
 - b.** Write one measure that can be taken to reduce the emission of these gases. (1 Mark)

