

Index Number

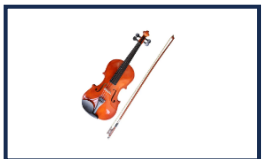
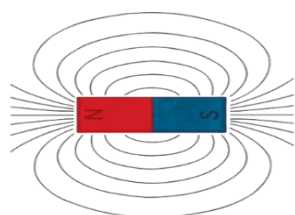
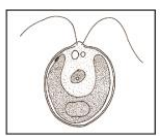
Grade 08	Paper I & II	Time 02 Hours
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Instructions:

- Answer all the questions in part I. Select the most appropriate answer and underline it.
- Answer 5 questions in part II including 1st question.

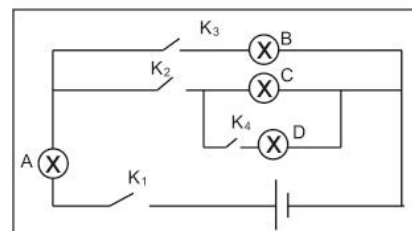
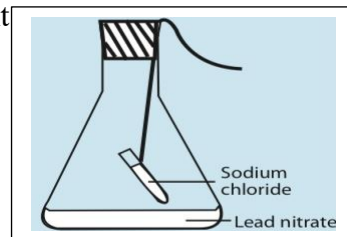
Part I

- (01) The group of microorganism in this diagram refers to is,
 1. Bacteria 2. Virus 3. Fungi 4. Algae
- (02) Which pair of food undergo putrefaction?
 1. Bread, Fish 2. Dodol, Kawum 3. Fish, Roti 4. Meat, Fish
- (03) Which group belongs highest number of animals?
 1. Arthropoda 2. Cnidaria 3. Annelida 4. Mollusca
- (04) The figure shows how the magnetic field lines are spread around a bar magnet. The correct direction of the magnetic field lines of this bar magnet is,
 1. From S to N 2. From left to right.
 3. From N to S 4. From right to left
- (05) Which is not a “compound” out of the following substances?
 1. Water 2. Copper sulphate
 3. Ammonia 4. Sulphur
- (06) The plant that has reduced the leaves to spines as an adaptation to minimize transpiration is,
 1. Temple tree 2. Kasa 3. Cactus 4. Navahandi
- (07) What is a function of underground stems?
 1. Perennation 2. Propagation 3. Storage of food 4. All the above
- (08) The characteristic only belongs to solids and liquids is,
 1. Having a definite shape. 2. Having a definite volume.
 3. Can be easily compressed. 4. Particles can move freely.
- (09)



The methods of producing sound by the above musical instruments respectively are,
 1. Vibrating membrane, air column, string 2. Vibrating air column, membrane, string
 2. Vibrating strings, air column, membrane 4. Vibrating membrane, string, air column

- (10) The magnetic material that is used to produce powerful magnets is,
 1. Soft Iron 2. Ferrite 3. Steel 4. Nickel
- (11) The answer which correctly denotes the physical quantity and the unit used to measure it is,
 1. Electric current, V 2. Potential difference, A 3. Resistance, Ω 4. Electric current, I
- (12) The Following diagram shows an experimental setup made by a student to verify the law of conservation of mass. Select the incorrect statement about this experiment
 1. When the two solutions are mixed, a white colour precipitate is formed.
 2. The masses before and after the test are unequal.
 3. A conical flask has been used for the experiment.
 4. The experiment is done in an open system.
- (13) The component that is not included in a healthy person's urine is,
 1. Salts 2. Urea 3. Water 4. Glucose
- (14) "When someone's clothes catch fire, should avoid running". Which factor needed for combustion is controlled in this instance?
 1. Receiving the supporter of combustion.
 2. Combustible substance reaching to its ignition temperature.
 3. Having a combustible substance.
 4. Removal of the combustible substance.
- (15) A step to be followed to maintain healthy skin is,
 1. Eating nutritious food. 2. Avoid being exposed to heavy sunlight.
 3. Avoid smoking. 4. All the above.
- (16) What are the switches to be closed in this figure in order to light up bulb A ?
 1. K_1 and K_2 2. K_1 , K_2 and K_4
 3. All the switches. 4. K_1 , K_3 and K_4
- (17) When playing a flute,
 1. Frequency decreases when the length of the air column increases.
 2. Frequency increases when the length of the air column increases.
 3. Frequency decreases when the length of the air column decreases.
 4. All of the above statements are incorrect.
- (18) What is the instance where the light effect of electric current is used?
 1. Electromagnets. 2. Electroplating
 3. LED bulbs. 4. Heat sinks
- (19) A- Dry skin with scales. B – Glandular wet skin.
 C – Body is covered with scales
 The animal groups which show the above characteristics respectively are,
 1. Reptilia, Amphibia, Pisces 2. Reptilia, Mammalia, Pisces
 3. Amphibia, Mammalia, Reptilia 4. Amphibia, Reptilia, Pisces



- (20) What is the most suitable method to control the present Dengue and Chikungunya pandemic?
1. Getting medical treatments after the infection.
 2. Being vaccinated.
 3. Eating nutritious food.
 4. Destroying places which has the possibility for mosquito spread.

(Marks 2 x 20=40)

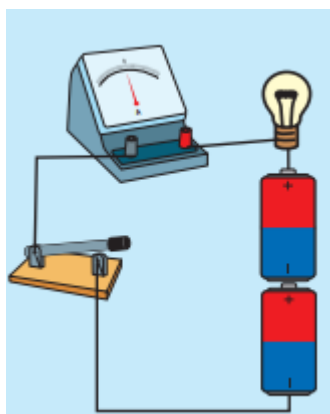
Part II

Answer 5 questions including the first question.

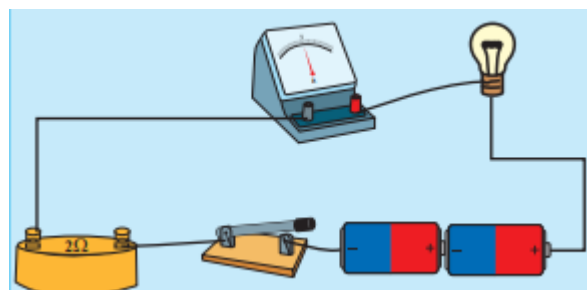
- 01 (A) Following experimental setup demonstrates the activity of microorganisms.
- I) Mention 2 substances used to prepare the mixture inside the bottle except yeast. (2 Marks)
 - II) Mention an observation that can be seen here. (1 Mark)
 - III) What is formed inside the bottle? (1 Mark)



- (B) Following diagrams show two activities done to find the relationship between the resistance and the current.



A

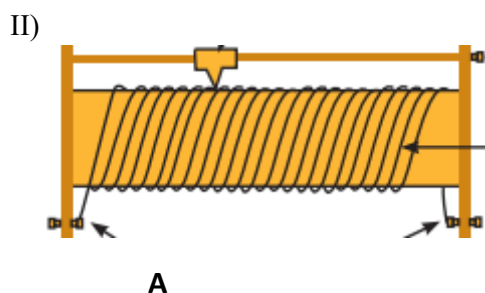


B

I)

	Instance	Brightness of the bulb
A	When the permanent resistor is not connected.	
B	When a 2 Ω permanent resistor is connected.	

(2 Marks)

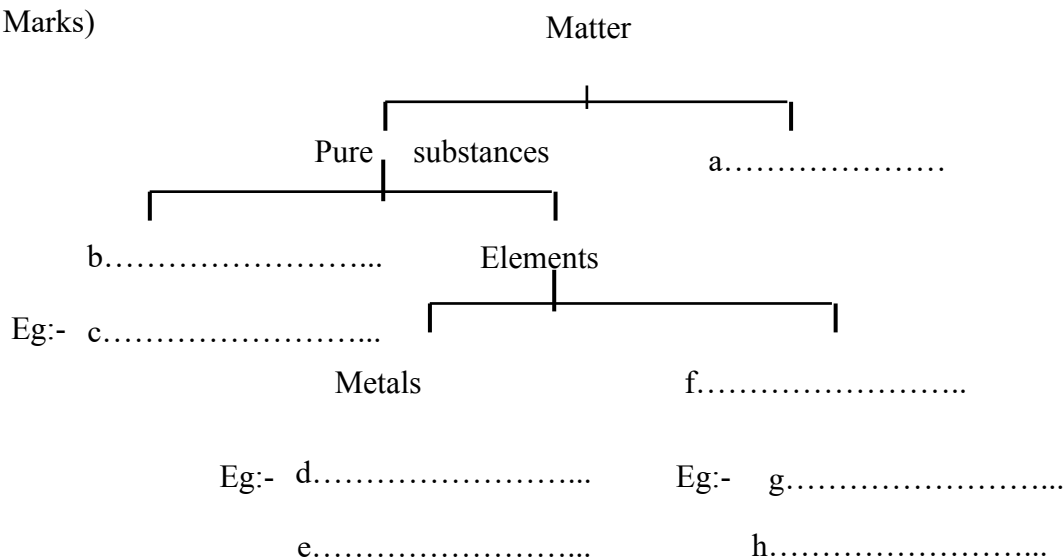


What are the above types of resistors?

A.

B. (2 Marks)

- (C)
- I. What is the colour of the gas evolved when Lead nitrate is heated? (1 Marks)
 - II. Draw the magnetic field around a bar magnet dipped in a glycerin and iron fillings mixture. (2 Marks)
 - III. What is the colour of the product formed after the mixing of Copper sulphate solution and Sodium hydroxide? (1Marks)
- (D) Fill in the blanks in the following chart by selecting appropriate words from the brackets. (4 Marks)



(Magnesium, non-metals, compounds, Sodium chloride, mixtures, sulphur, Mercury)
(Total marks 16)

(2) (A) The following features were observed in an aquatic animal.

(a) Streamlined body shape. (b) Body is covered by scales.

I) To which group does this animal belong to? (1Mark)

II) What is the advantage of having a streamlined body shape to this animal? (1Mark)

III) Mention two another vertebrate groups except the above group. (1 Mark)

IV) What is the invertebrate group that has a soft body with a skin moistened with mucus
(1 Mark)

V) Mention the two types of body forms of Cnidaria. (1 mark)

(B) Fill in the blanks.

I) Like poles of magnets (a)..... whereas unlike poles of magnets (b).....

II) (c)..... and (d)..... methods are used to make permanent magnets.

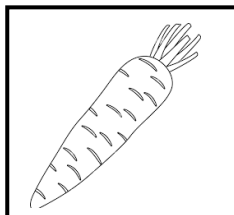
III) The area around a magnet where the magnetic power is spread is called as the (e).....

IV) The magnetic north lies a few degrees (f)..... from the real north.

(1 x 6 = 6)

(Total marks 11)

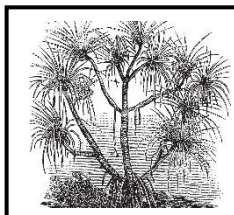
(03)(A) Following diagrams show plant roots which perform specific functions.



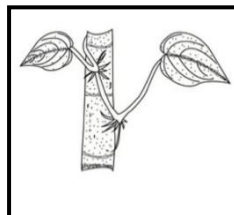
A



B



C



D



E

I) What is the main function of plant roots? (1 Mark)

II) Mention another plant which has the roots indicated in plant C. (1 Mark)

III) Name the roots in the diagrams A,B,C,D. (2 Marks)

IV) What is the significance of the roots in plant E (1 Mark)

(B) Following diagrams illustrate an experimental setup arranged to find out one of the factors affecting towards rusting of iron.

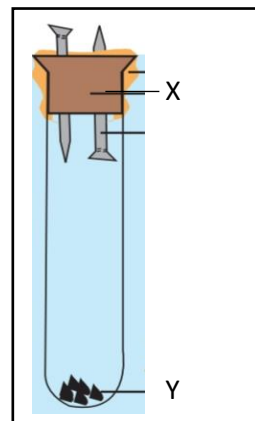
I) Name x and y. (2 Marks)

II) Which factor affecting towards rusting has been experimented here? (1 Mark)

III) What can be observed in the iron nails inside and outside the testtube after few days? (2 Marks)

IV) What is the other factor needed for rusting? (1 Mark)

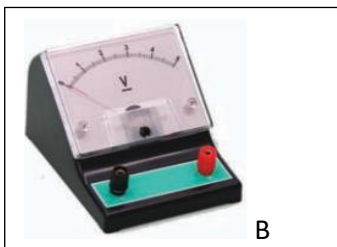
(Total marks 11)



(04) (A)



A



B

I) Name A and B. (2 Marks)

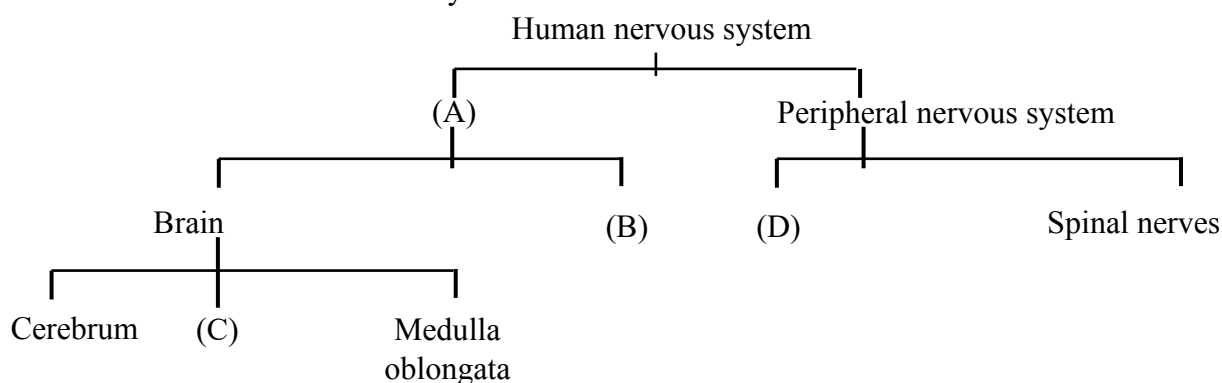
II) Mention separately the ways of connecting A and B to circuits. (2 Marks)

(B) Put $\checkmark$ if the following statements are correct and x if they are incorrect.

- I) All matter consist of particles. ()
- II) Solids, Liquids and gases can be compressed easily. ()
- III) Copper is a brittle metal. ()
- IV) Chlorine is a nonmetal in liquid state. ()
- V) Bottled water is a pure substance. ()
- VI) Density bottle can be used to measure a same volume again and again. ()
- VII) The melting point of ice is 0°C . () (7 Marks)

(Total marks 11)

(05) (A) The coordination of humans is carried out by the nervous system. Following chart illustrates the structure of human nervous system.



I) Name A, B and C. (3 Marks)

II) Mention the part of the brain which contribute to function following actions.

- a) Controlling higher mental skills such as memory and intelligence.
- b) Controlling the body balance. (2 Marks)

III) What is the special membrane around the brain and spinal cord which contributes to their protection? (1 Mark)

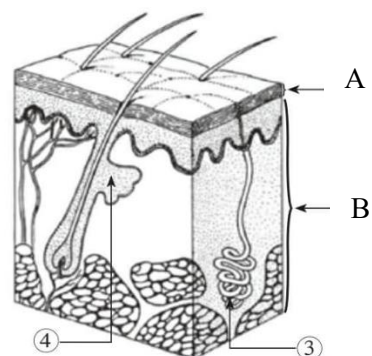
III) “A cricker hits a ball coming towards him”. Mention the receptor and the effector relevant to this incident. (2 Marks)

(B) Skin is the largest organ of the human body.

I) Mention the two main parts of the skin denoted here as A and B (2 marks)

II) What is the function of the colour pigment melanin in the epidermis? (1 Mark)

(Total marks 11)



(06) (A) The following diagram shows the way of connecting three bulbs as A, B, C

I) What is the method of connectiong A,B,C bulbs in this diagram?

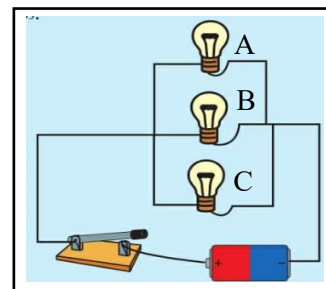
(1 Mark)

II) Draw this curcuit again by using the standard symbols.

(2 Marks)

III) The bulbs heat up after the circuit is closed. Write down the energy transformation in this instance.

(1 Mark)



IV)Mention a type of a bulb which can be used efficiently in the household. (2 Marks)

(B) Refer to the experiment done below to find out the discontinuous nature of matter.

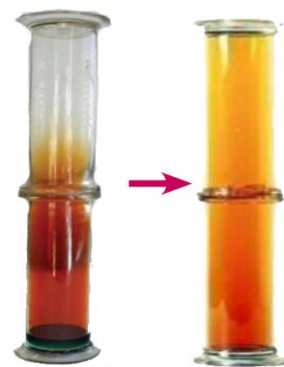
I) What is the brown colour gas formed here? (1 Mark)

II) What is the conclusion of this experiment? (2 Marks)

III) Draw the particle arrangement of a gas. (1 Mark)

IV) Mention a characteristic of gases according to the above arrangement of particles? (1 Mark)

(Total marks 11)



07. Select the answers relevant to the part A from part B and write down the relevant letter on the space.

A

I. Sound is produced in the xylophone _____

II. The unit used to measure frequency is _____

III. Sound is produced by _____

IV. An instance where we cannot observe vibrations _____

V. A _____ is needed for the sound to propagate.

VI. The treatment giving using music is _____

VII. When the length of the arms of the tuning fork increases the frequency _____

VIII. When the thickness of the strings of a violin reduces, its frequency _____

IX. An instrument which the sound is produced by vibrating a membrane _____

X. In order to hear the sound produced by the flute made from coconut leaves _____

XI. By adjusting the length of the vibrating parts of musical instruments, the frequency _____ be changed.

B

a. The length should be decreased.

b. Decreases.

c. Musical therapy

d. Can

e. Vibrations

f. Increases.

g. By vibrating metals

h. A tuning fork vibrating at a higher frequency

i. Udakkiya

j. Hertz

k. Medium

(Total marks 11)