Education Zone - Kelaniya

Second Term Evaluation - 2017

Grade 8 | Science I,II | Time :02 hours

Name :.....

- *Answer all questions*
- *Underline the correct answer.*

01. The correct answer with the underground stems which stores food is,
    1. Carrot and potato
    2. Ginger and colocasia (gahala)
    3. Sweet potato and " Innala"
    4. Beet and carrot.

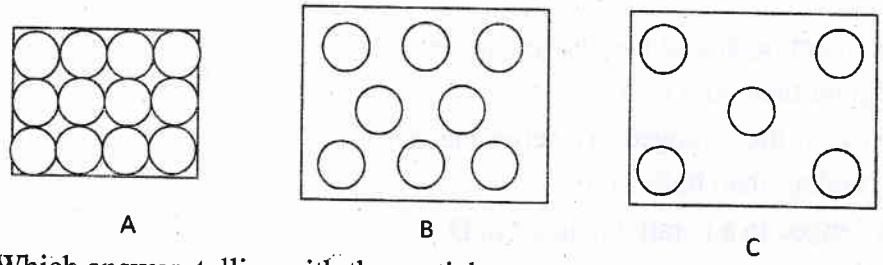
02. Animal which bears a radial symmetrical body is,
    1. Leech
    2. Sea anemone
    3. Snail
    4. Butterfly

03. The pathogen which causes common cold is,
    1. Fungi
    2. Virus
    3. bacteria
    4. Protozoa

04. Which of the following instance is a change of state
    1. Cooling of steam
    2. Burning of a magnesium strip
    3. Putting an iron nail to a copper sulphate solution
    4. Adding zinc granules to hydrochloric acid

05. A) Electrical current in a circuit is measured using the ammeter.
    B) The unit of measuring current is ohm
    C) Resistance is measured using the ammeter
    which of the above statement / statements is / are correct
    1. Only A
    2. Only B
    3. Ba and C only
    4. A and C only

06.



Which answer tallies with the particle arrangements of the given picture respectively
1. Water , iron, air
2. Iron, water, air
3. Air, water, iron
4. Iron, air, water

07. A density bottle was filled with water and coconut oil separately and measured their masses separately. Bottle with water had more mass than the bottle with coconut oil. The conelution can be taken with this results is.

1. Coconut oil has higher density than water
2. When coconut oil added to a beaker with water starts to float on coconut oil
3. Water and coconut oils has equal densities
4. Water has a higher density than coconut oil

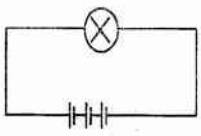
08. A property of sulphur is,

1. Malleablitity
2. Thermal conductivity
3. Brittleness
4. Electrical conductivity

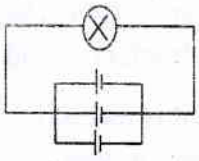
09. Select the statement with the correct function of each part of the central nervous system

1. Cerebellum - Controls involuntary functions such as breathing
2. Medulla - Relays messages from the brain to different parts of the body
3. Spinal cord - Coordination of body balance
4. Cerebrum - Controls higher brain functions such as memory

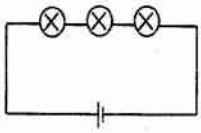
10. Given below are 4 circuit diagrams assembled by a group of grad 8 students using identical bulbs and dry cells.



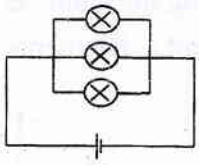
A



B



C

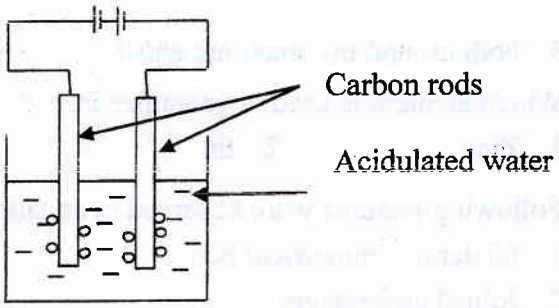


D

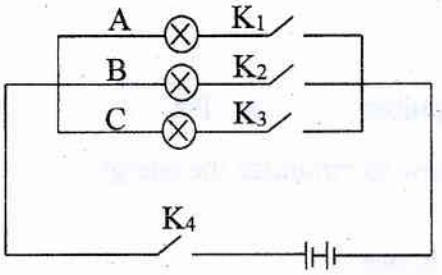
Select the false statement regarding the above circuits

1. Bulb in B is brighter than bulb in A
2. In a step, the dry cells are arranged in a series manner.
3. Bulbs in D are brighter than bulbs in C
4. The bulbs are arranged in a parallel manner in D

11. Which effect of electrical current is tested in the following arrangment.
    1. Chemical effect of electrical current.
    2. Heating effect of electrical current
    3. Magnetic effect of electrical current
    4. Light effect of electrical current



12.



What are the keys in the circuit that should be closed (on) to light B bulb ?

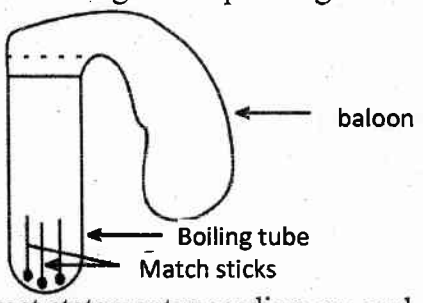
1. K_1 and K_4 2. K_1 and K_2 3. K_2 and K_3 4. K_2 and K_4

13. The correct statement regarding the limits of hearing human is,
    1. Below than 20 Hz
    2. Higher than 20 000Hz
    3. In between 25 000Hz - 70 000Hz
    4. In between 20 Hz - 20 000Hz

14. The equipment which uses an electromagnet is,
    1. Compass
    2. Direct current motor
    3. Electrical bell
    4. Bicycle dynamo

15. The electromagnetic power increases when,
    1. The number of coil loops are increased
    2. The number of coil loops are decreased
    3. An insulated core is used in the middle of the coil
    4. A small current is passed through the coil.

16. Following is a step arranged to confirm a one if the scientific laws.



<u>Before heating the tube</u>

mass of the boiling tube with match sticks + mass of the baloon = m1

<u>After heating the tube ,</u>

mass of the boiling tube with match sticks + mass of the baloon = m2

Correct statement regarding m_1 and m_2

1. m_2 mass is less than m_1
2. m_2 mass is less than m_2

3. both m_1 and m_2 mass are equal. 4. m_1 mass is nearly equal to m_2 mass

17. Which element is used to galvanize iron ?

1. Zinc 2. tin 3. Magnesium 4. Sodium

18. Following features were observed in an animal,

1. bilateral symmetrical body.
2. Joined appendages.
3. Body posses an exoskeleton.

The group this animal belongs to is,

1. Aves 2. Athropoda 3. Amphibia 4. Pis Case

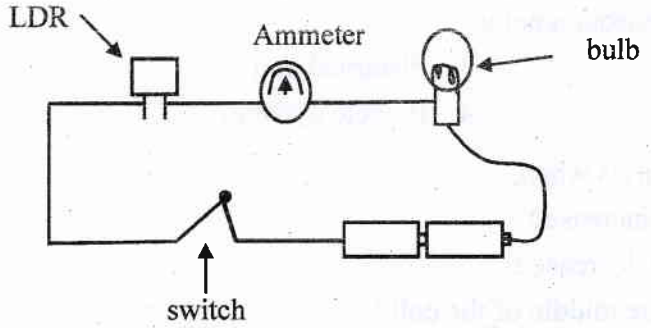
19. Given below are some proceeding that you can follow to minimize the energy crisis in today era.

A Using bulbs made out of LED to illuminate the house.
B Using a table lamp to read books in the night.
C Switch off the refrigerator from 6/30 pm to 9.30 pm
D family members ironing cloths randomly

The omes which contribute to conserve energy out of the above are,

1. A and B only 3. A and C
2. A, B, and C 4. A,B,C and D

20.



What would be observed it the light depending resistor is covered with a hand,

1. the milliammeter will deflect to the opposite direction.
2. The brightness of the bulb will reduces.
3. Bulb sill turn off
4. No change will be observed in the bulb or in the ammeter.

Part II

- Answer 5 questions including the first one

01 (A) Few students in grade 8 brought the following thing to do an activity to

Samples	Things in the sample
A	Green coloured water taken from a pond
B	A solution made out by mixing sugar and yeast in water.
C	Water sample rotten with rotten hag
D	A glass of milk which was kept exposed to the air for a day

i. Name a micro-organism groups that could be in A and D beakers seperately. (M. 2)
ii. Draw a picture of the microscopic view of yeast cells. (M. 1)
iii. Write 2 difrence that could be seen in the "D" glass of milk compared to a fresh glass of milk. (M. 2)
iv. What is the non gaseous product produced in sugar fermentation process. (M. 1)

(B) A bacteriological solution added to the garbage in aurban arears for bio-degradation.

i. Name a weful product that could be made by using the garbage collected in urban areras (M. 1)
ii. Write 2 favourable factors for microbial- growth. (M. 2)
iii. Mention a microbial product used in the field of medicine. (M. 1)

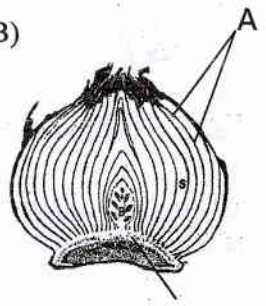
(C) Various methodes are implemented to control microbial cativities on food.

i. What factor is needed for controling microbial growith when food is refrigerated? (M.2)
ii. Name a food item that could preserved by storing in sugar/houney (M. 1)
iii. What is the name given for microbial activity on food high with protein. (M. 1)
iv. What would be obseved when sugar is added to yeast. (M. 2)

02 (A) Vegetative reproduction and many other various functions were done by various parts of plants.

i. What is vegetative reproduction (M. 1)
ii. In which plant part does vegitative reproduction happen in Bryopillum (Akkapana) Plant (M. 1)
iii. What is the function of roots, that are hanging out from the orchid plant. (M. 1)
iv. mention an advantage of having stilt roots for the pandans (vatakeiya) plant.(M. 1)

(B)



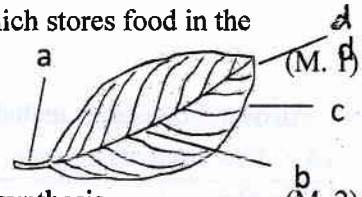
The diagram illustrated below is a longitudinal section of an onion bulb.

i. Why is it considered as an under ground stem. (M. 1)
ii. name a and b parts of it. (M. 1)
iii. Pepper does not coil around the support. So how is it adapted to grasp the support. (M. 1)

iv. Give an example for a plant which stores food in the aerial stems. (M. 1)

B

(C) Following is a rough diagram of a plant leaf.



i. Name a and c parts of it. (M. 1)

ii. Write 2 adaptations taken by plant leaves for photosynthesis. (M. 2)

03 (A) i. Describe 'excreation' briefly (M. 1)

ii. Write the excreatery product removed in each given organ.

(a) kidneys (b) skin (M. 1)

iii. What is the main nitrogenous excreatory product removed from human body. (M. 1)

iv. Give 2 good healthy habits that should be followed to maintain the healthy nature of the kindenys (M. 2)

(B) Human's skin is a multipurpose organ.

i. Write the 2 main parts of the skin (M. 1)

ii. Give another function of the skin other than excreation (M. 2)

(C) i .What is meant by coordination. (M. 1)

ii. What are the 2 main co-ordination methods in the human body. (M. 2)

04 Magnetism is a physical property possessed by some of the materials.

(A) Following things were kept on a table in the labotary.

- an auminium sheet.
- a steel wire
- a graphite rod
- a lead wire
- a copper sheet
- an iron nail

i. Write 2 magnatic materials from the above provided things. (M. 2)

ii. Given below are some steps followed to demonstrate the magnetic feild around a bar magnet. (M. 2)

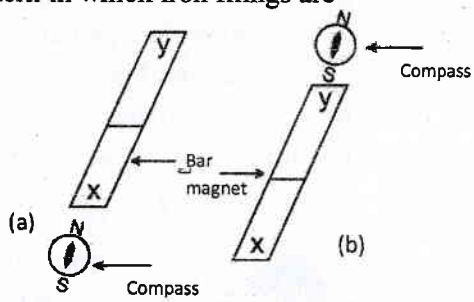
(a) Place a paper on the bar magnet.

(b) Spread iron filings on the paper.

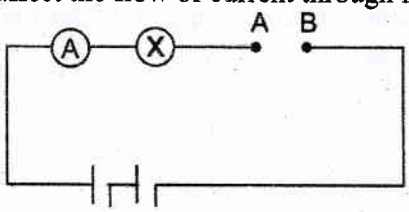
(c) Tap on the paper gently. (M. 2)

Draw a rough diagram to illustrate the pattern in which iron filings are arranged around the bar magnet.

iii. above a and b observations were obtained when a compass was used to identify the poles of an unmarked magnet. Identify x and y poles of the magnet



(B) Given below is a set up arranged to find out whether the resistance of a conductor affect the flow of current through it.



Nature of the illumination of the bulb and the ammeter readings were recorded when each

piece of nichrome and a copper wire same connected seperately to A and B terminals.

i. When which wire was connected between A,B terminals will the bulb lights brightly?

ii. What is the reason for the above observation.

iii. What is the relationship between the resistance and the current flow of a conductor.

iv. Coppy the above circuit diagram and draw how the way you would connect a voltmeter, to measure the potential difference across the bulb.

05 (A) Match the suitable answers for x with y

	X	Y
i.	A process which uses carbondioxide and water	aerial roots
ii.	A process which helps to transport water to the upper parts of the plant.	photosynthesis
iii.	A root type which absorbs air from the atmosphere	Vegetative reproduction
iv.	A root type which absorbs moisture from the atmosphere	Respiratory roots.
v.	A function of the underground stems.	Transpiration

(B) State whether the following statements are true (T) or false (F)

i. Coral polyps are free Swimming organisms. ( )

ii. Things that occupy space and have a mass are considered as matter. ( )

iii. The discontinues nature of matter way put forward by Aristotle. ( )

iv. The temperature at which a solid become a liquid is called boiling point. ( )

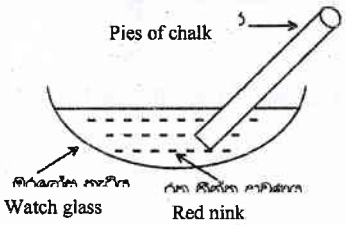
v. Not only metals but some nonmetals also conducts electricity ( )

vi. The frequency of the tuning fork increases with its length. ( )

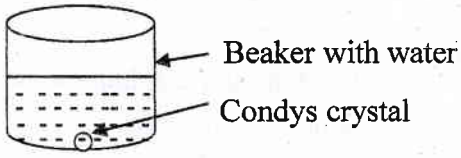
06 (A) The environment around us is composed of matter and energy

i. State the energy type , which increases the temperature of things.

ii. .



1 step

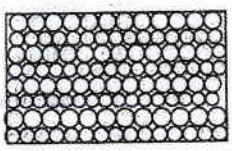


2 step

Complete the given table with the observations and conclusions you got from the above activities

activity	Observation	Conclusion.
1		
2		

iii. The diagram given below illustrates then particle rrangement of a particular substance



(a) According to the particle arrangement of the above matter , determine its physical state.

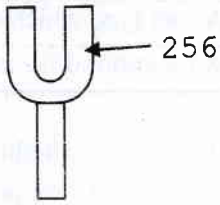
(b) Mention a special physical property of this matter according to state.

(B) Musical instruments are divided into three categories according to the part that vibrate when they produce sound. One type among them is musical instruments which produce sound by vibrating membranes.

i. Give an example for a musical instrument with vibrating membrane

ii. Write a method could be followed to increase the frequency of a guitar.

iii. Rough sketch of an instrument used in activities about sound is given below.



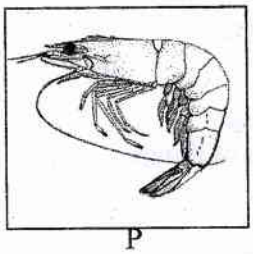
(a) Name the equipment

(b) What is meant by 2560Hz

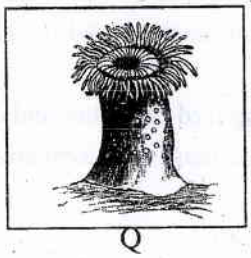
07 (A) Three is a vast bio diversity in the earth.
Organisms are classifieds for learning purposes

i. Describe animal classification briefly

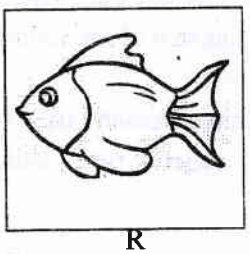
ii. Following are diagrams of three animals



P



Q



R

P Q R

Out of the above animals write the correct letter of the animal that bears each of the features given below

(a) Presence of a vertebral column - .....

(b) Lead a sedentary life - .....

(c) have appendages with joints. - .....

iii. Name the vibrate group which undergoes metamorphosis.

iv. Eventhough the bat can fly, it is not consided as a bird.

(a) Do you agree with the above statement?

(b) Give two morphological features possed by the bat to confim your answer.

v. Write a reason which causes kidney stones.

vi. kidney failure disease is spread varsity in North Central Province in Sri Lanka . Write the most probable cause for this.