

Department of Education - Western Province

Year End Evaluation - 2013

1181

Grade 7
Science

Name / Index No :

Time : 2 Hours

Part I

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

- Which one of the following animals does not show camouflage?
(i) leaf insect (ii) dragon (iii) pangolin (iv) frog
- What is the standard unit to measure density?
(i) kgm^{-2} (ii) kgm^{-3} (iii) Kgm^{-3} (iv) gm^{-3}
- Which one of the following is an underground stem ?
(i) beet (ii) carrot (iii) sweet potato (iv) potato
- Some solids directly convert into gases without converting to liquid by increasing temperature. This process is called
(i) radiation (ii) sublimation (iii) convection (iv) conduction
- Which one of the following is the most suitable example to explain transfer of heat by conduction?
(i) Transferring heat to the hand when stirring a gravy with a metal spoon.
(ii) Feeling hot when we stay near a burning hearth.
(iii) Movement of leaves on a tree when there is a fire under the tree.
(iv) Feeling hot when stay inside a house, which has the roof made of asbestos.
- Which one of the following statement is wrong ?
(i) The relative density of water is 1.
(ii) Substance which has relative density is less than 1 float on water.
(iii) Substance which has relative density is more than 1 sinks in water.
(iv) The unit to measure relative density is kilogram per cubic meter.
- In which environment viviparous germination occurs ?
(i) aquatic environment (ii) arid environment
(iii) mangrove environment (iv) coastal environment
- Which system in human body involve in transportation of substance and protect from diseases?
(i) digestive system (ii) reproductive system
(iii) blood circulatory system (iv) nervous system

9. The correct organization of living body is,

- (i) cell → tissue → organ → system → organism
- (ii) tissue → cell → organ → system → organism
- (iii) system → tissue → organ → cell → organism
- (iv) organ → tissue → cell → system → organism

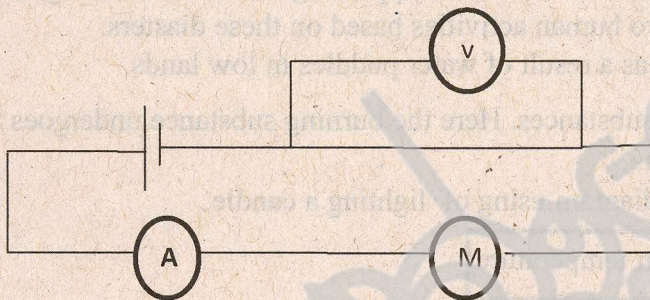
10. Which one of the following is a mineral ?

- (i) granite
- (ii) quartz
- (iii) lime stone
- (iv) marble

11. A non contact force is,

- (i) impulse forces
- (ii) thrust forces
- (iii) tension forces
- (iv) magnetic forces

12. In the above diagram what is labeled as the



- (i) voltmeter
- (ii) ammeter
- (iii) motor
- (iv) bulb

13. A cyclist takes 10 seconds to go 80 meters. What is the speed of this movement?

- (i) 8 ms^{-1}
- (ii) 30 ms^{-1}
- (iii) 800 ms^{-1}
- (iv) 0.8 ms^{-1}

14. Which one of the following substances is a compound?

- (i) glucose
- (ii) mercury
- (iii) oxygen
- (iv) gold

15. The group of neutral substances often used houses

- (i) salt, sugar, surgical spirit
- (ii) ash, baking soda, soap
- (iii) lemon, fruit juice, vinegar
- (iv) water, betel, slaked lime, sugar

16. Indicators are used to identify acidic and basic substances. Find the most suitable statement

- (i) Boiled water with arecanut, gives red colour with acid.
- (ii) Red litmus, turns blue colour with acid.
- (iii) Blue litmus turns red with bases.
- (iv) Boiled water with red shoe flower, gives red colour with acid.

17. The following statements are based on forces.

- A. Force has a magnitude and direction.
- B. Force has only a magnitude.
- C. A force can be a pull, push or lift.
- D. Newton scale can be used to measure the force.

The correct statements of above are,

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

18. Which one of the following impendence's occur during the lunar eclipse ?
- The shadow of the moon falls on the earth.
 - The shadow of the moon falls on the sun.
 - The moon enters in to the shadow of the earth.
 - The sun enters in to the shadow of the earth.
19. When an Ebonite stick rubbed with a flannel cloth, the ebonite stick gets a negative charge and the flannel cloth gets positive charge, What is the reason for this Phenomena ?
- Electrons flow from flannel cloth to the ebonite stick.
 - Electrons flow from ebonite stick to flannel cloth .
 - Positive charges flow from the flannel cloth to ebonite.
 - Positive charges flow from ebonite stick to the flannel cloth.
20. Pre-cast concrete technology was introduced by ,
- Mr. D.J Wimalasurendra
 - Dr. Arthur C. Clarke
 - Prof. Cyril Ponnampereuma
 - Dr. A.N.S Kulasinghe

Part II

- Answer the first questions and four more questions.
- The first question gets 16 marks and 11 marks each for other questions.

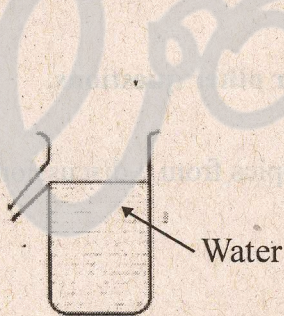
01. Answer the following questions based on the following topics, from a discussion, on the unit of force and Energy
- handling forces
 - variation of forces
 - storing of energy
 - management of energy resources
- State 4 references used to collect information for each group.
 - Name a contact force and non contact force which were discussed by the group variation of forces.
 - State 2 ways to demonstrate contact force and a non contact force mentioned above.
 - Write 2 examples each for storing energy under natural incidence and an artificial incidence for storing energy.
 - The group based on Management of energy recources, discussed the activities to save energy as a school student at home. State 2 such activities.
 - When a weight is placed on an air filled balloon, the shape of the balloon changes or it bursts. Which force act on this incident?
 - Which force acts against the movement of a bicycle when apply breaks?

02. The interactions between living organism and the interactions between living organisms and abiotic environment is important for the existence of the living world .

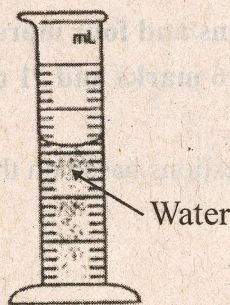
- i. Give one example for each interactions on the followings.
 - a. between animal and animal
 - b. between plants and abiotic environment
- ii. Write the strategies used by the following animals for their protection.
 - (a) Squid
 - (b) geko
- iii. Organism survive during the unfavourable conditions by following various strategies. What is the term given for this process?
- iv. Write 2 groups of organism which digest organic matter.
- v. Write 2 factors which involve in soil erosion.
- vi. Write one strategy followed by human to prevent soil erosion.
- vii. What is termed as formation of soil by breaking rocks into small pieces?
- viii. The earth consist of 3 layers. Which layer is the thickest among the layers?

03. (A) You are asked to measure the volume of a piece of granite. Below given are few equipment to use in the activity.

- i. Identify and name the below given equipment.



(a)



(b)

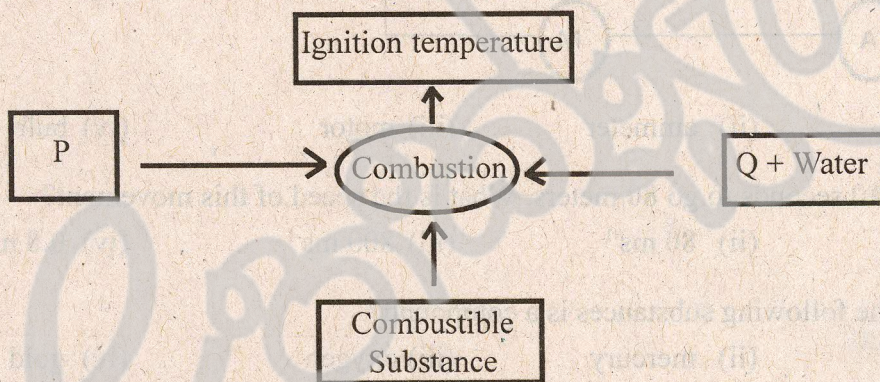
- ii. Write two things you should consider when measuring a certain volume of water using (b) equipment.
- iii. Select one of the above mentioned equipment and draw a diagram to show the above activity, with other instruments you need.
- iv. Nimal poured 100 ml of water in to the set up B and tried to find the volume of the piece of granite, mentioned above. He found out the increased volume as 110 ml.
 - a. Find the volume of the piece of granite in cm^3 .
 - b. If the mass of granite is 25 g, calculate the density of it.

(B) Equal volume of water and coconut oil are poured into two yoghurt cups and measured the weight.

- i. Is the mass of two yoghurt cups equal or not?
- ii. Explain the reason for your answer in (i) above.

04. (A) Below given are items used in our homes.
salt, water, vinegar, chunam (lime), goraka, washing powder
- Name two substances that convert red litmus into blue.
 - Name the common name used for above (i).
 - Write two observations, when vinegar is added to powdered egg shells.
 - A patch could be seen after sometime when soap is added to an aluminum vessel.
Explain the reason.
 - Vinegar is a dilute acid. Write the name of that acid.
- (B) During a heavy rain fall, rivers and other water bodies over flowed and badly affect day to day human activities. All the roads were blocked. As a result, large areas of roads covered with water and washed away soil and rocks. Water in the rivers turned to brown colour and many houses damaged with cracks.
- Find out two natural disasters mentioned in the above paragraph.
 - Having turned clear water in to brown, and appearing cracks on buildings are signs of certain disasters. Write two human activities based on these disasters.
 - Name a disease that gets as a result of water puddles in low lands.

- (5) (A) Combustion is the burning of substances. Here the burning substance undergoes the same chemical reaction with oxygen.
- Complete the following diagram using of lighting a candle.



- Explain the term 'Ignition temperature'?
- Write activities done by you in the laboratory to identify P and Q.
- Name a substance used to identify water as a product of combustion.

- (B) We come across amazing plants animals and inventions which are related to the environment. Match the relevant explanation with the marvels of Earth.

- | | |
|--|-------------|
| a. the largest flower in the world | ● Sundew |
| b. total parasite | ● Bao bab |
| c. the fruit is dispersed by rotating with its two wings as it is released from the tree | ● Rafflesia |
| d. Nature's water pot | ● Cuscuta |
| e. Insects get attracted as it resembles nectar | ● Hora |

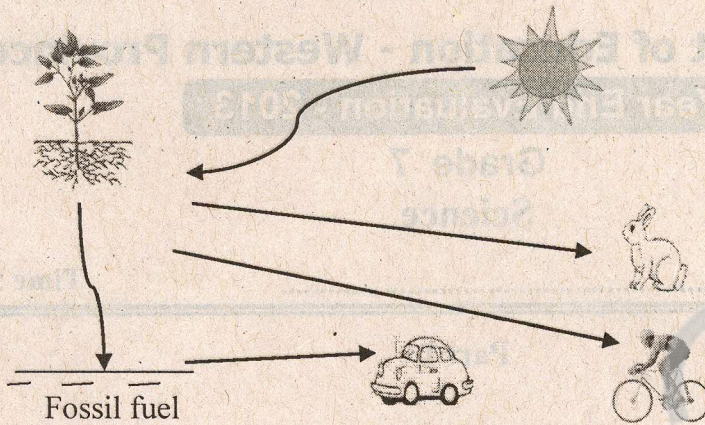
- (6) (A) pieces of cloth is soaked in a water beaker and find out the number of water drops that falls within a minute using a stop watch.

If 50 drops of water were fallen within two minutes, find the rate of falling water drops .

- (B) Name the type of rotation for the following situations.

- | | |
|---|-----------------------------------|
| a. The movement of a pendulum bob | b. The movement of a electric fan |
| c. The movement of the earth around the sun | d. A fallen fruit from a tree |

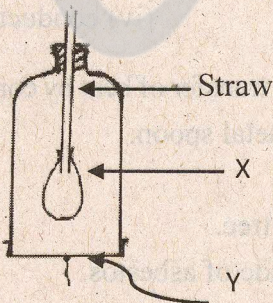
(C) Following diagram shows energy transformation.



- i. Among the above mentioned energies in the flow diagram write two natural ways of storing energy.
- ii. Write an alternative energy source used for motor vehicles instead of fuel.
- iii. Write the energy transformation of a man riding a bicycle.
- iv. Write devices used in a bicycle to transfer energy.
- v. Write a food chain with three links including rabbit.

(7) (A) Cells are the basic units of the animal body, These cells are adapted to do various functions.

- i. What is a "Tissue" ?
- ii. The following set up is designed show a system of an organism.



- a. Name two suitable substance for X and Y.
- b. Name the system connected with this set up.
- c. Write two observations, that take place when pulls down this system.

(B) Below given are two pictures levers which are considered as simple machines.



(a)



(b)

- (i) Name the type of lever connect with the pictures.
- (ii) Give an example for a inclined plane used as a machine.
- (iii) What type of a simple machine does turning a tap belongs?