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மேல் மாகாணக் கல்வித் திணைக்களம்  
Department of Education – Western Province

පළමු වාර ඇගයීම  
முதலாம் தவணை மதிப்பீடு – 2018  
First Term Evaluation

ශ්‍රේණිය } தரம் } 09 Grade }	විෂයය } பாடம் } Science Subject }	පත්‍රය } வினாத்தாள் } I, II Paper }	කාලය } காலம் } 02 Hours Time }
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Name :- .....

Index No :- .....

**Part I**

- Answer all the questions. Underline the correct or the most suitable answer.

- 1). A free living bacteria lives in the soil.  
(i). Vibrio Cholerae      (ii). Azotobacter      (iii). Lactobacillus      (iv). Rhizobium
- 2). A vaccine made from toxins by removing toxic components.  
(i). Measles      (ii). Influenza      (iii). Tetanus      (iv). Polio
- 3). The way of the pathogen of Typhoid fever enters the body of human.  
(i). Through the digestive system with food      (ii). Through open wounds on the skin  
(iii). Through the respiratory system      (iv). Through the skin by mosquito bite
- 4). The are of the retina, where light sensitive cells are **not located**.  
(i). Yellow spot      (ii). Cornea      (iii). Iris      (iv). Blind spot
- 5). Select the correct statement about defects of vision.  
(i). A person having short sight defect is able to see far objects clearly, but close objects unclear.  
(ii). Long slight can be corrected by using a concave lens.  
(iii). A person having long sight defect sees distant objects clearly while here by objects appear blurred.  
(iv). Long sight and short slight are the defects of vision arises due to genetic factors.
- 6). Less transparency in eye lens and prevent the light rays focusing properly on the retina.  
(i). Glaucoma      (ii). Cataract      (iii). Sore eyes      (iv). Eye infections

7). A student has mentioned following ideas about the structure and function of ear.

A - Audio sensory organ of the body is ear.

B - Cochlea contributes to maintain the balance of the body.

C - Semi-circular canal transmit auditory senses to the auditory nerve.

The correct statements are,

(i). A only

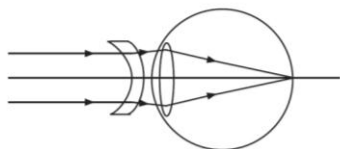
(ii). A and B

(iii). A and C

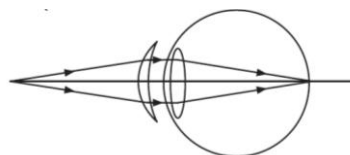
(iv). All the statements are correct

8). Which diagram shows the way of use of lens for correcting long sight.

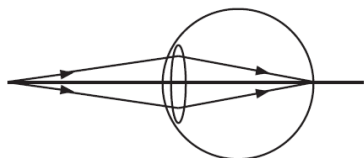
(i).



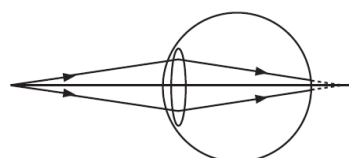
(ii).



(iii).



(iv).



9). The chemical combination of two or more elements in a certain ration is known as;

(i). Mixtures

(ii). Elements

(iii). Compounds

(iv). Solvents

10). The number of protons, electrons and neutrons in the  $^{23}_{11}\text{Na}$  atom respectively are,

(i). 11, 12, 11

(ii). 12, 11, 11

(iii). 11, 11, 12

(iv). 23, 11, 13

11). The name of the compound of  $\text{C}_2\text{H}_5\text{OH}$  is,

(i). Ethanol

(ii). Glucose

(iii). Sucrose

(iv). Acetic acid

12). Select the correct statement from the followings.

(i). Combination of two or more pure substances forms a mixture.

(ii). Crystallization is a chemical method of separating components in the mixture.

(iii). The specific feature of a mixture is that its constituents cannot be separated by physical methods.

(iv). Distill water is an example for mixture.

13). A force means a pull or a push. What is the Standard International unit of measuring force?

(i). Kilograms

(ii). Newton meter

(iii). Meter

(iv). Newton

14). Which one of the following is not the defect of ear?

(i). Thickness of ossicles

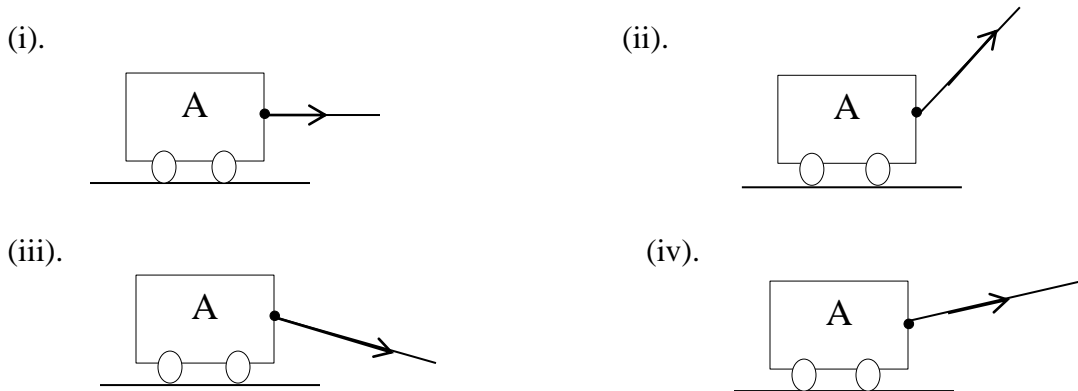
(ii). Deafness

(iii). Loss of audibility range

(iv). Shortness of Eustachian tube

- 15). A feature of a vector quantity is,
- (i). With a specific direction
  - (ii). With a magnitude and without a direction
  - (iii). With a direction and magnitude.
  - (iv). With a specific direction without a magnitude.
- 16). Select the correct statement.
- (i). Pressure is high when the contact area is less.
  - (ii). Pressure is less when the contact area is high.
  - (iii). Pressure is less when the contact area is less.
  - (iv). Pressure is not depend on the surface area on the force is acting.
- 17). What is the pressure exerted on a surface of  $5 \text{ m}^2$ , when a force of  $80 \text{ N}$  is acting on it?
- (i).  $\frac{80 \text{ N}}{5 \times 5 \text{ m}^2}$
  - (ii).  $\frac{5 \text{ m}^2}{80 \text{ N}}$
  - (iii).  $80 \text{ N} \times 5 \text{ m}^2$
  - (iv).  $\frac{80 \text{ N}}{5 \text{ m}^2}$

- 18). The point of application of a force is;
- (i). The point on which the force is acting on the object.
  - (ii). The rotating point on which the force is acting on the object.
  - (iii). The point which is in the middle of the object.
  - (iv). The point which is directed towards to the moving direction of the object.
- 19). A is a loaded cart which instance is the easiest to move it, by applying an equal force?



- 20). In which of following instance is used to increase of pressure.
- (i). Increase the number of wheels in heavily loaded trucks.
  - (ii). Sharpening of the knife.
  - (iii). Use of broad tyres in heavily loaded trucks.
  - (iv). Use of broad wooden plank to walk from a muddy ditch.

(20×20=40 Marks)

## Part II

- Answer **Five Questions** including **First question**.

(01). Recall what you have learnt different elements and compounds.

(i). Define the term 'element'? (01 Mark)

(ii). State how compound is different from an element. (01 Mark)

(iii). Categories following pure substances as compound and elements.

Oxygen, Sodium chloride, Sulphur, Iron. Potassium permanganate, Lead

Magnesium hydroxide, Nitrogen (04 Marks)

(iv). Name two heterogeneous and 2 homogeneous mixtures that you can find at home. (04 Marks)

(v). Name the elements in the following compounds.

1. Glucose - 2. Water- (02 Marks)

(vi). The standard method of writing certain element is  ${}_{19}^{39}\text{K}$ ,

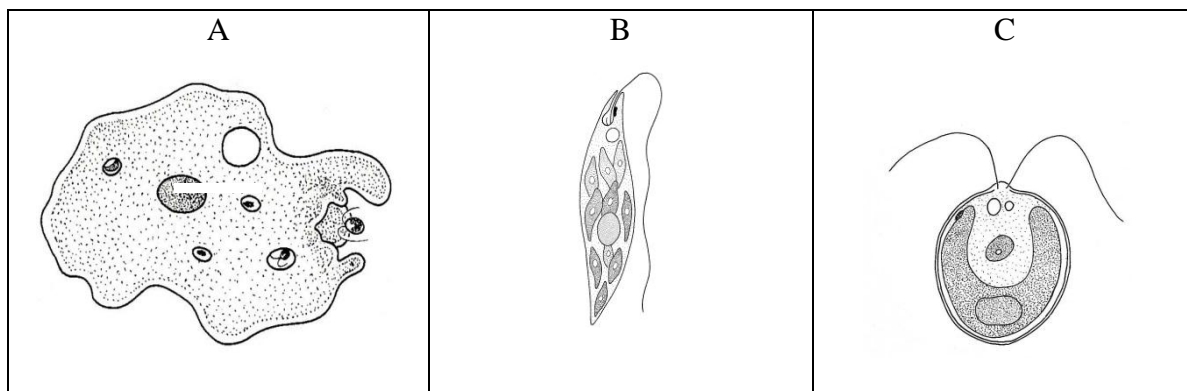
1. Number of Protons

2. Number of Neutrons

3. Number of Electrons

4. Atomic number of that element. (04 Marks)

(02). (i). Identify and name the micro-organisms in the following diagrams.



(03 Marks)

(ii). Name two products based on microbial activity. (02 Marks)

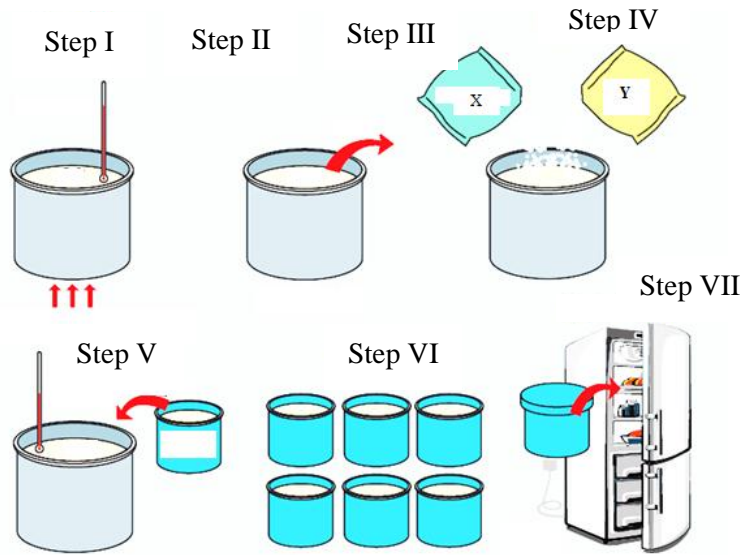
(iii). What is the name given for the environmental condition that most of the living organisms cannot survive but microorganisms can? (01 Mark)

(iv). Write 2 examples for such environment. (02 Marks)

(v). Use word antibiotics (02 Marks)

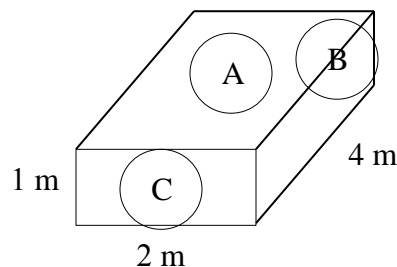
(vi). Name an antibiotic used to destroy fungi. (01 Mark)

(03). (A). Following diagram show some steps of production of yoghurt in school laboratory.



- (i). What is the temperature range should be maintained in thermometer in step II? (01 Mark)
  - (ii). Name the substance that should be removed after cooling the mixture. (01 Mark)
  - (iii). Name the substances added in step III and IV. (01 Mark)
  - (iv). Explain the reason of adding yoghurt into the mixture. (01 Mark)
  - (v). What would be the temperature of the milk in the above situation? (01 Mark)
  - (vi). How long should the mixture be kept in the refrigerator? (01 Mark)
- (B). (i). Write two factors needed for the growth of microbes. (02 Marks)
- (ii). Define the following terms.
- a. Putrefaction
  - b. Fermentation (02 Marks)
- (iii). Name a disease cause due to a protozoan. (01 Mark)

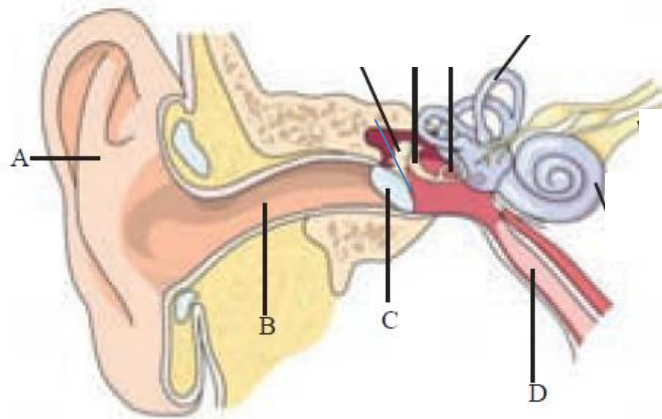
(04). A sketch of cuboid shaped object with a mass of 8000N is given below.



- (i). Calculate the pressure acting on surface a when cuboid is kept to contact with its surface A. (02 Marks)

- (ii). Which contact surface creates the maximum pressure on the ground ? (01 Mark)
- (iii). Name two factors effect on pressure (02 Marks)
- (iv). Write two instances from in day today life where;
- Increase of pressure (02 Marks)
  - Decrease of pressure (02 Marks)
- (v). School bags with broader hanging strips are good to use. Explain it scientifically giving regions. (02 Marks)

(05). (A). A diagram of a human ear is given below.



- (i). Name the labeled parts A, B, C, D. (02 Marks)
- Human ear is divided into 3 areas, areas as outer car, middle ear and inner ear..
- (ii). Name 3 bones in the middle ear. (01 Mark)
- (iii). What is the function of D' (01 Mark)
- (iv). State two reasons for defects of hearing in human ear. (02 Marks)

(B). Eye is an optical sense organ in human body. The amount of light that enters to eye controls by (a)..... Light enters to eye through (b)..... The light sensitive rod cells and cone cells are located in (c)..... Reflection of light occurs through (d)..... of the eye. Loss of transparency in it leads to the eye defect called as (e)..... (05 Marks)

(06). Select the suitable answer for the statements in A, from B, and put the relevant letter inside the brackets.

- | <b>A</b>   | <b>B</b>                              |
|--|---------------------------------------|
| (i). The atom is the indivisible particle in the matter stated by,                       | ( ) (a) Compounds                     |
| (ii). Collection of 2 or more elements forms.  | ( ) (b) Steam distillation            |
| (iii). Can be separated from physical methods.   | ( ) (c) point of application of force |
| (iv). A heterogeneous mixture.   | ( ) (d) Muddy water                   |
| (v). The person who stated, the central core of the atom has positively charged nucleus. | ( ) (e) Outer ear                     |
| (vi). Separation of cinnamon oil from cinnamon leaves                                    | ( ) (f) Convex lens                   |
| (vii). Separation of different fuels from crude oil.                                     | ( ) (g) Mixtures                      |
| (viii). Separating sugar from cane sugar syrup.  | ( ) (h) Eustachian tube               |
| (ix). Use for correcting long sight.   | ( ) (i) John Dalton                   |
| (x). Direct the sound to tympanic membrane.  | ( ) (j) Fractional distillation       |
| (xi). The point where a force is acted on an object.                                     | ( ) (k) Ernest Rutherford             |

(11 Marks)

(07). (A). (i). Write two changes occur in a moving object when force is applied. (02 Marks)

(ii). Force is considered as a vector quantity. What is the reason for it? (02 Marks)

(iii). Reservoirs are constructed with broader dams. Explain the reasons for it. (02 Marks)

(B). (i). Write the names of the elements denote by following symbols.

(a). Na (b). Cl (02 Marks)

(ii). Write the symbols for following elements.

(a). Silver (b). Lead (02 Marks)

(iii). Chemical formula of the Acetic acid is  $\text{CH}_3\text{COOH}$ . Write the elements in it. (01 Mark)