Zonal Education Office, Vadamaradchy

SECOND TERM EXAMINATION-2019

Grade - 09 | **SCIENCE** | Time : 2 hrs.

Index No.: | Marks :

PART I

❖ **Answer all questions**

1) Select the structure that is connected to the pharyn x which helps to keep the pressure equal on both sides of the ear drm.
   1) External auditory canal 2) Cochlea
   3) Optic nerve 4) Eustachean tube

2) Select the group which only contain pure metals.
   1) Iron , lead , Steel 2) Brass , Iron , Copper
   3) Copper , Iron , Gold 4) Nichrome , Iron , Zinc

3) Which of the following is considered as a physical change.
   1) Burning a paper 2) Metals becoming tarnished
   3) Evaporation of water 4) Ripening of fruits

4) Which of the following correctly shows the atomic number and the mass number of chlorine (Cl) atom?
   1) $^{35}_{17}Cl$ 2) $^{17}_{35}Cl$ 3) Cl^{35}_{17} 4) Cl^{17}_{35}

5) What is the Physical method of separating the extract of cinnamon oil from cinnamon leaves?
   1) Vaporisation 2) Crystallisation 3) Fractional distillation 4) Steam distillation

6) Select the group which only include diseases, spread by viruses.
   1) Tuber culosis , Typhoid , Cholera 2) Syphilis , Pneumone , cholera
   3) Amoebic dysentery , Aluham , Common cold 4) Aids , Dengue, Common cold

7) The living fossils are
   1) Coelacanth fish , and Monkey 2) Coelacanth Fish and Lungfish
   3) Lion and Whale 4) Horse and Coelacanth fish

8) Where the imge is formed when a person who has long sight and the type of lens. used to correct this defect is
   1) on retina and convex meniscus lens 2) Infront of the retina and convex meniscus lens
   3) behind the retina and convex meniscus lens 4) behind the retina and concave meniscus lens

9) Find the pressure exerted by an object of 60 kg on a surface of $3m^2$

1) $\frac{\theta\ N}{3m^2}$ 2) $\theta\ kg \times 3m^2$ 3) $\frac{3m^2}{\theta\ N}$ 4) $\frac{600N}{3m^2}$

10) A valve which can be seen between the right atrium and the right ventricle.

1) Bicuspid valve 2) Tricuspid valve 3) Semiluna valve 4) Mitrar v alve

11) Growth of the pollen towards the ovule is known as.

1) Positive geotropic movement
2) Positive thigmotropic movement
3) Positive phototropic movement
4) Positive chemotropic movement

12) Right and left pulmonary veins are opened in to the

1) Right ventricle 2) Right atrium 3) Left ventricle 4) Left atrium

13) A place where green concept is not used.

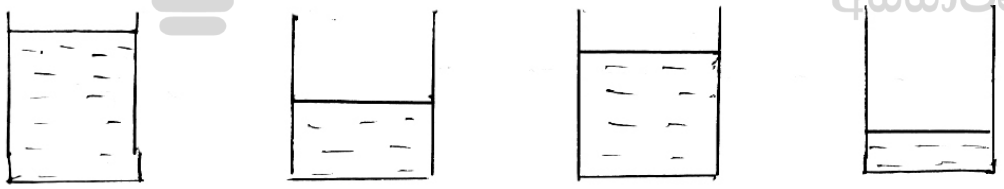
1) German parliamentary building
2) Beijing national sports complex in China
3) White house in England
4) K_2 housing project in Australia

14) Select the correct statement in relation to the electroplating.

A :- Solution of copper sulphate should be used to coat copper on iron ring
B :- A high voltage should be applied
C :- The Iron ring should be connected to the positive terminal

1) B only 2) A only 3) A and B only 4) A and C only

15) Figure given below shos four liquids, that have equal masses , kept in equal containers.



Select the correct answer which illustrates the ascending order of densities of four liquids.

1) K < L < M < N 2) K < M < L < N 3) N < L < M < K 4) N < M < L < K

16) International unit (SI) of density is

1) g ml^{-1} 2) g cm^{-3} 23) kg m^{-3} 4) kg m^{-2}

17) Out of the following is not a threat for bio-diversity.

1) Environmental pollution
2) spread of invasive species
3) Increasing human population
4) study of bio diversity

18) Density of a solution is $2000kgm^{-3}$ Find the mass of 0.25 m^3 volume of this solution.

1) 2500 kg 2) 500kg 3) 80 kg 4) 800 kg

19) Select the correct statement from the following statements.

1) Solid sodium chloride (NaCl) is an electrical conductor
2) Fused sodium chloride (NaCl) does not conduct electricity
3) An aqueous solution of sodium chloride conducts electricity
4) Solid Sodium chloride consists of mobile ions

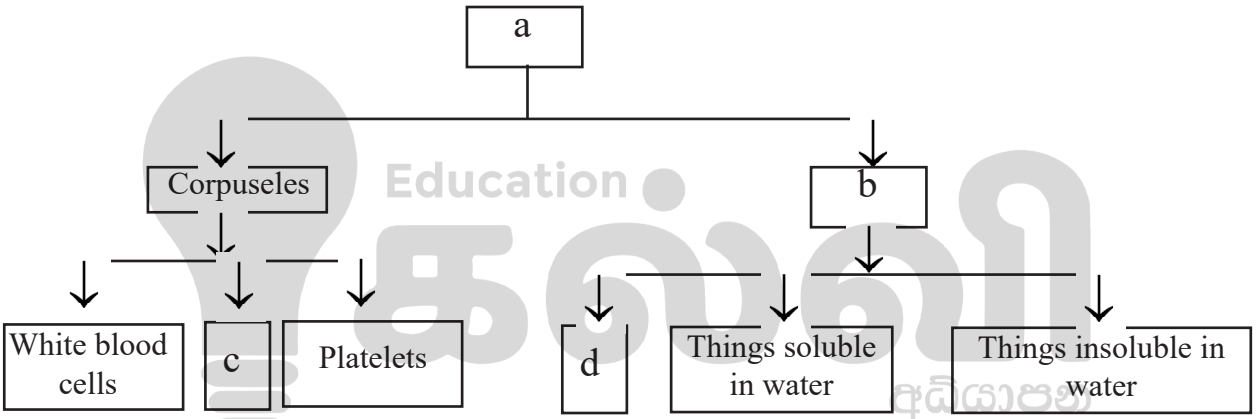
20. The substance which is used to induce flowering in Pine apple in off - season is
1) 2 , 4 Dichloro phenol 2) IAA 3) NAA 4) IBA

(20x2=40 marks)

PART - II

Answer any four questions.

1) 1) Complete the following chart.



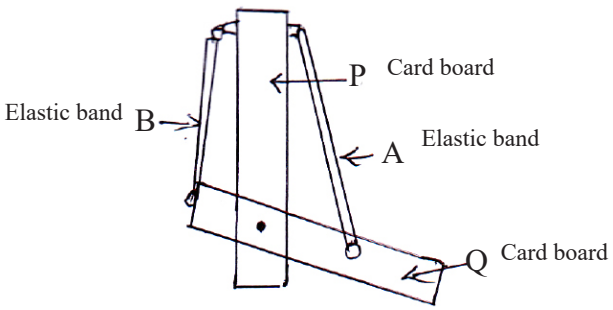
(4)

2) Write down two functions of blood. (2)
3) Write down two differences between arteries and veins. (2)
4) State the universal donor and the universal recipient of blood respecrtively. (2)
5) What is known as blood transfusion? (2)
6) Mention two favourable habits to maintain a healthy blood circulatory system. (2)
7) Give the reason for agglutination. (1)

(15 marks)

2) A model of an elbow unit prepared by using card board piece is shown here.

A) 1) What happens when elastic band A contracts withiout moving the P? (2)
2) What happens when eleastic band B contracts without moving the P? (2)
3) What happens when biceps muscle is contracted? (2)
4) What happens when triceps muscle is contracted? (2)



B) 1) Write down a growth substance that is used to destroy weeds with broad leaves. (1)

2) Name an artificial growth substance that is used to induce root formation on stem cuttings. (1)

3) Write down an example for a positive phototropic movement. (1)

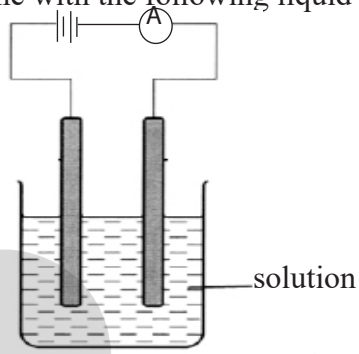
4) Write down the appendages used by the following animals for their locomotion.
   a. A moeba
   b. Euglena
   c. Param ecium
   d. Dolphin

(4)

(15 marks)

3) The following setup was arranged by a student to identify electrolyte and non-electrolyte. The activity was done with the following liquid / solution. Record the observations in the following table.

A)



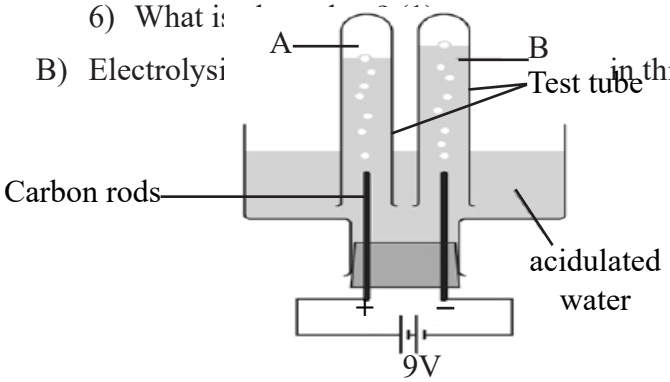
Liquids / solutions	indicator deflects / does not deflect
1) Kerosene	
2) Salt solution	
3) Copper sulphate	
4) Distilled water	

(4)

5) Name two electrolytes from the above solutions. (2)

6) What is [illegible] (1)

B) Electrolysi[illegible] in this diagram.



1) What are used as electrodes? (1)

2) Explain why the electrodes used here are considered as inactive electrodes? (1)

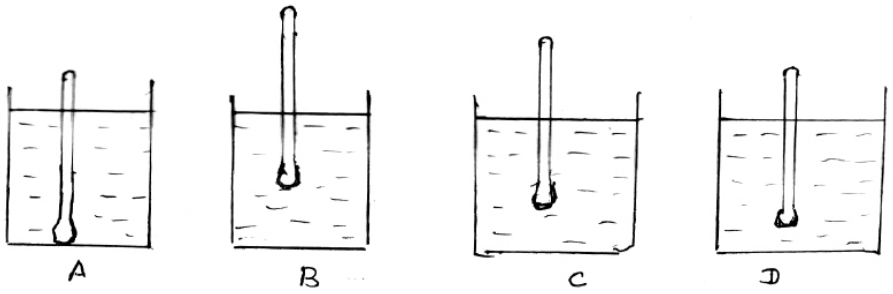
3) Define electrolysis (2)

4) Name the gases A and B (2)

5) How can you identify the gas B (2)

(15 Marks)

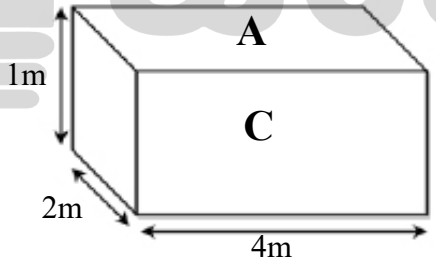
4. A) I uring cylinders by Grac



1) Name the instrument used by the students to measure density. (1)
2) Write the liquids in ascending order of their density. (2)
3) Mercury , Water, Petrol, Glycerine are given to you to do the above experiment. In the above solutions which solution is A? (2)
4) Volume of the liquid A is $2m^3$ and its mass is 2000 kg. Find the density of liquid A. (2)

5) Name the instrument tht is used to measure the density of following liquids.
   a) Milk -
   b) Rubber latex -
   c) Sea water - (3)

B) 1) Give the svmbol of standard unit of measuring pressure. (1)
2) Give)
3)



The length , breadth and heighit of the cuboid shown in the figure are 4 m , 2m and 1m respec tively. Its weight is 400N. Find the pressure exerted by this object ont he surface. (2)

(15 marks)

5) Micro-organisms have been used in different industries by human.
1) Give two industries based on Microbial activity. (2)
2) Give two instances where micro-organisms are used in the medical field. (2)
3) Mention two instances where microbes are used in environmental conservation. (2)
4) What is food spoilage? (2)
5) Give two diseases caused by micro organisms in plants. (2)