A

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E 806

FIRST TERMINAL EVALUATION 2019-20

BASIC SCIENCE

Standard: VIII

Time : 1½ Hour
Total Score : 60

Instructions

- The total cool off time Physics, Chemistry and Biology is 15 minutes. Read the questions carefully and understand them during this time.
- Answers are to be written in the order, Physics, Chemistry and Biology. The time for each section is 40 minutes. The answer books must be returned to the teacher after writing each subject.

PHYSICS

Score : 20
Time : 40 Minutes

Answer any TWO questions from 1 to 3. Each question carries 1 score. **(2 x 1 = 2)**

1. Which among the following is a derived quantity? (1)

   a) mass b) displacement c) volume d) temperature

2. Cheetah is the fastest animal on land. Its speed is given in different ways. Which among these is correct? (1)

   a) 25 metre per s b) 25 m/s c) 25 m/s^2 d) 25 M/S

3. Which is the correct statement? (1)

   a) Distance travelled and displacement of a mango falling from a mango tree are the same.

   b) Objects moving with uniform speed will have uniform velocity too.

Answer any SIX questions from 4 to 10. Each question carries 2 score. **(6 x 2 = 12)**

4. Identify the relation between the first pair of words and complete the second pair suitably.

   a) Length : Metre
      Time : ..... (1)

   b) Speedometer : Speed
      Sundial : ..... (1)

5. Find the odd one out from the following. Justify your answer.

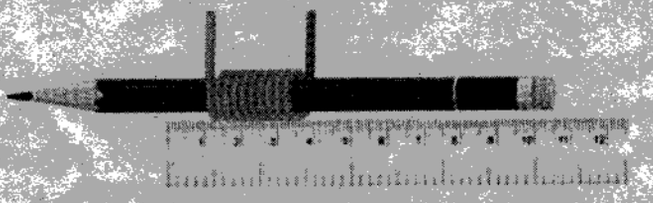
   (metre, light year, second, astronomical unit)

6. Write the following units in the ascending order of their value.

a) millimetre, nanometre, centimetre, micrometre. (1)

b) quintal, kilogram, milligram, gram. (1)

7. 10 turns of wire are closely wound around a pencil as shown in the figure. When measured using a scale as shown, the length of total turns is obtained as 25 mm. Then



a) What is the thickness of the wire? (1)

b) Express the thickness of the wire in centimetre. (1)

8. The conversation between two students standing on the road side about a person inside a moving bus is given below. (2)

Student 1 : "That person is at state of rest"

Student 2 : "No, he is in motion"

Explain the possibilities of the correctness of these statements based on the concept of a reference body.

9. Velocity of a car started from rest reaches 24 m/s in 4 s.

a) What are the initial velocity and the final velocity of the car? (1)

b) Calculate its acceleration? (1)

10. Tabulate the following motions into those with uniform velocity and those with non uniform velocity.

a) A stone thrown vertically up. (2)

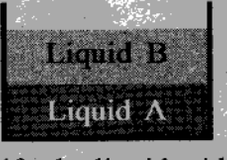
b) Light travels through vacuum.

c) A ball rolled up on a floor.

d) Motion of minute hand of a clock.

Answer any <u>TWO</u> questions from 11 to 13. Each question carries 3 score. **(2 x 3 = 6)**

11. Two imissible liquids with different densities 810 kg/m^3 and 1000 kg/m^3 are taken in a jar.

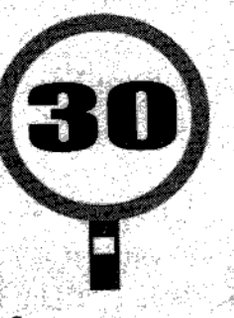


a) From the given details identify the liquid with the density 1000 kg/m^3 from the figure. (1)

b) Explain the reason for your conclusion. (1)

c) "When the liquids like petrol or diesel are on fire, never try to extinguish the fire using water"- Explain the statement based on your conclusion. (1)

12. The following figure is of a traffic sign board placed near school for road safety.

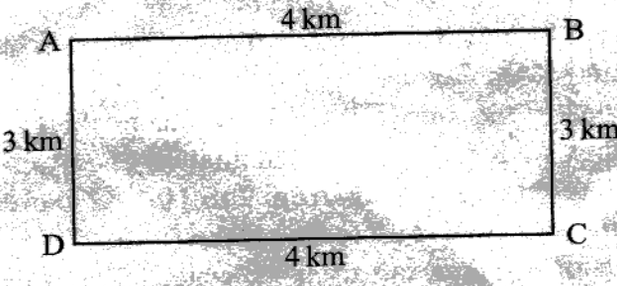


a) What does the board indicate? (

b) A motor bike rider travels 180 km in 2 hours through the road near the schc Calculate his average speed. Does he cross the speed limits as per Kerala Road Saf Rules. (

c) Which is the device used to find the speed in vehicles. (

13. Examine the figure below. A man starts from A and reaches D through the points B and



a) Find the displacement and the distance travelled from A to D. (1

b) Among quantities distance and displacement identify the vector quantity. (1

c) Write an example for a scalar and a vector quantity. (1

CHEMISTRY

Score : 20
Time : 40 Minutes

Answer any five questions from 1 to 6 (1 score each) **(5x1=5)**

1. In which of the following three states, the distance between the particles is maximum ? (1)

   (Solid, Liquid, Gas)

2. Choose the monoatomic molecule from the bracket. (1)

   (Hydrogen, Oxygen, Helium, Nitrogen)

3. The apparatus used for separating the components from a mixture of water and kerosene is ..... (1)

4. Some pure substances are given below.

Carbon dioxide, Nitrogen, Water, Sugar

   Identify the odd one among these substances. (1)

5. One of the following elements is named on the basis of colour. Find out this element. (1)

   (Polonium, Neptunium, Chromium)

6. Choose the correct statement from the following. (1)

   (i) Molecule formed from more than two elementary atoms are called diatomic molecule.

   (ii) All atoms of the same element show identical properties.

   (ii) Mixtures are formed by the combination of only one type of particles.

Answer any three questions from 7 to 10 (2 scores each) **(3x2=6)**

7. Find out the relation and fill in the blanks.

   Separation of common salt from sea water : Evaporation.
   Separation of components from black ink : .....(a).....
   Separation of iron powder from sand : By using magnet.
   Separation of tea dreg from tea : .....(b)..... (2)

8. Molecular formula of Ammonia is NH_3.

   a) Find the number of hydrogen atoms in this molecule. (1)

   b) How can you represent two molecules of Ammonia? (1)

9. Some substances and their boiling points are given in the table.

Substance	Boiling point
Water	100^0C
Ethanol	78^0C
Methanol	65^0C

   (i) Which method can be adopted for the separation of components from a mixture of ethanol and methanol.

   [Distillation, Fractional distillation, Sublimation] (1)

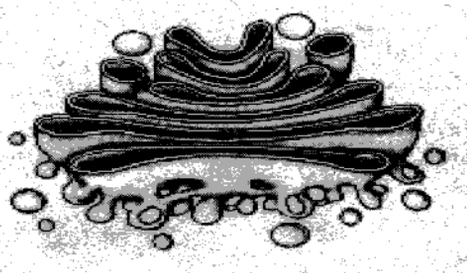
   (ii) Give the reason for choosing this method for the separation (1)

BIOLOGY

Time : 40 minutes
Score : 20

Answer any 3 from questions 1 to 4. Each question carries 1 score. (3x1=3)

1. Identify the cell organelle.



2. Correct mistakes if any, in the underlined part of the given statements.
   a. Collenchyma is seen in the soft parts of the plant.
   b. Sclerenchyma is made up of cells that are uniformly thick allover the cellwall.
   c. Muscular tissue can transform into other type of cells.
   d. Blood carries out the conduction of materials and makes the body resistant to diseases.
3. From the pair of scientists given below, choose the correct pair related to the formulation of cell theory.
   - Robert Brown and Robert Hook
   - M.J.Schleiden and Theodor Schwann
   - Robert Brown and Rudolf Virchow
   - Theodor Schwann and Robert Hook
4. Identify and name the connective tissues performing the following functions.
   a. Connects other tissues.
   b. Provides support, protection and definite shape to the body.

Answer any 4 from questions 5 to 9. Each question carries 2 score. (4x2=8)

5. 'Nucleus is the regulatory centre of cell'- Evaluate the statement by giving reasons.
6. Certain parts of a cell are given below. Choose suitable parts to complete the table.

   ■ Cell wall ■ Nucleus ■ Lysosome
   ■ Cellmembrane ■ Centrosome ■ Vacuole

Seen only in plant cells	Seen only in animal cells
■ ■	■ ■

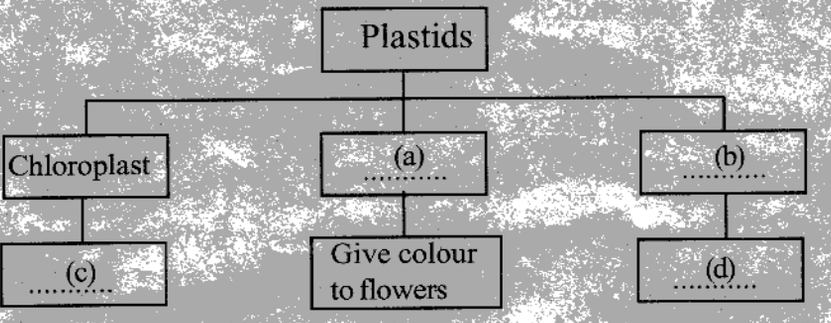
7. Analyse the given statement and answer the questions.

"Consists of cells that can contract and regain the original state".

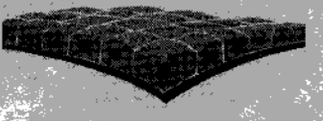
a. Name the animal tissue mentioned here.

b. Write its function.

8. Complete the illustration related to plastid.



9. Identify the animal tissues A and B and write any one function of each.



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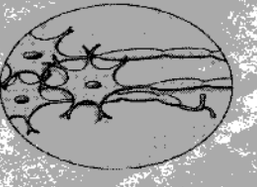


B

Answer any 3 from questions 10 to 13. Each question carries 3 score. (3x3 = 9)

10. Various stages in the preparation of a slide to observe the plantain root cells through a microscope are given in the box. Arrange them in correct order.

- Put the thinnest sections to a watch glass containing stain.
- Place a coverglass over the material in such a way that air bubbles do not pass.
- Put the stained section in the glycerine on the slide.
- Take thin cross sections of the material to be observed.
- Add one or two drops of glycerine to the slide.
- Shift the sections to a watch glass containing water.

a. Put the material to be observed in a petridish containing water.

b.

c.

d.

e.

f.

g.

h. Wipe out the excess glycerine and observe through a microscope.

11. A portion of the Science Diary of a student is given below. Analyse it and answer the questions.

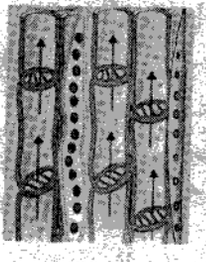
In our body, there are certain specialised cells that can transform into any kind of cells. They compensate the destruction of cells....

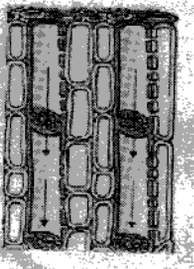
a) Name the cells indicated in the diary.

b) How does they compensate the destruction of cells in the tissue ?

c) What is the importance of these cells in modern medicine?

12. Observe the diagram of vascular tissue and answer the questions.





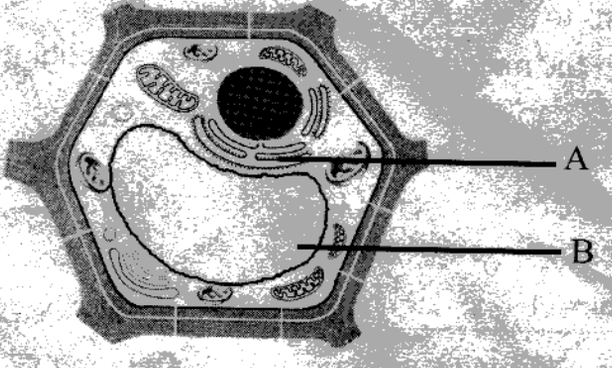
(a) Xylem (b) .....

i) Identify (b)

ii) Why are they known as vascular tissues?

iii) Write two peculiarities of each of them.

13. Observe the diagram and answer the question.



Name the parts A and B and write their functions.