

6) A wooden spoon is dipped in a cup of ice-cream. Its other end becomes cold by

- a) conduction
- b) convection
- c) radiation
- d) does not become cold

7) Bile juice secreted from the liver is stored in a sac called

- a) stomach
- b) villi
- c) gall bladder
- d) pancreas

8) Anaerobic bacteria digest animal waste and produce biogas (change-A). The biogas is then burnt as fuel (change-B). Choose the correct option.

- a) A is physical but B is a chemical change.
- b) B is physical but A is a chemical change.
- c) both A and B are chemical changes.
- d) both A and B are physical changes.

9) In cockroaches, air enters the body through

- a) spiracles
- b) gills
- c) lungs
- d) skin

10) The temperature of a patient was recorded as 40 degree C. In degree F, the temperature is

- a) 77 degree F
- b) 104 degree F
- c) 40 degree F
- d) 140 degree F

Q.II Answer the following questions in short.

2 x 5 = 10

1) Analogy type questions-

- a) Ant's sting : calamine :: soil treatment : _____.
- b) _____ : car batteries :: sodium hydroxide : soap.

2) Burning of paper and folding of paper are considered as two different types of changes. Justify. (2 points)

3) Compare any two properties of acids and bases.

4) For a certain soil sample, it took 40 mins for 200 ml of water to pass through it. Calculate the rate of percolation.

5) Draw neat diagram of soil-profile and label four main layers.

Q.III Answer the following questions :-**3 x 6 = 18**

1) State two important differences between conduction, convection and radiation.

2) Write the correct a) symbols of the elements- Potassium and Aluminium.

b) formula of the compounds- Ammonia and silver chloride.

3) Complete the following table-

Indicator	Colour in acidic medium	Colour in basic medium
1) Red litmus paper	-----	-----
2) Phenolphthalein	-----	-----
3) Methyl orange	-----	-----

4) How is the loss of heat minimized by a thermos flask? (3 points)

5) Give reasons-

a) An antacid tablet gives relief from acidity.

b) Stainless steel pans are provided with copper bottoms.

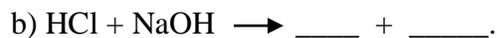
c) Mercury is used in thermometers. (1 point)

6) Draw neat and labeled diagram of human digestive system.

Q.IV Answer the following questions-**4 x 3 = 12**

1) a) What is soil erosion? b) Differentiate between sandy soil and clayey soil.(3 points)

2) Complete the following equations-



3) a) What are villi? What is their location and function?

b) Name the following-

1. The new substance formed when carbon dioxide is passed through lime water.
2. The method to prevent rusting by coating iron with zinc.
3. The kind of reaction in which an acid reacts with a base to produce salt and water.
4. The chemical name of vinegar.

Q.V Answer the following questions-

5 x 2 = 10

- 1) Write an activity to show displacement reaction between iron and copper Sulphate solution.
- 2) a) Describe the mechanism of breathing in humans. Draw labeled diagram to show inhalation and exhalation.

OR

- b) 1. Differentiate between aerobic and anaerobic respiration. (3 points)
 - 2..Describe lungs as the main respiratory organs in humans.
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