

Annual Evaluation 2017-18

Basic Science

STD : VII

Time: 2 Hours

Instructions

1. Fifteen minutes cool-off time. Read the questions carefully.
2. Total 10 activities are given. Write any eight.
3. Five points for each activity. Total 40 points.

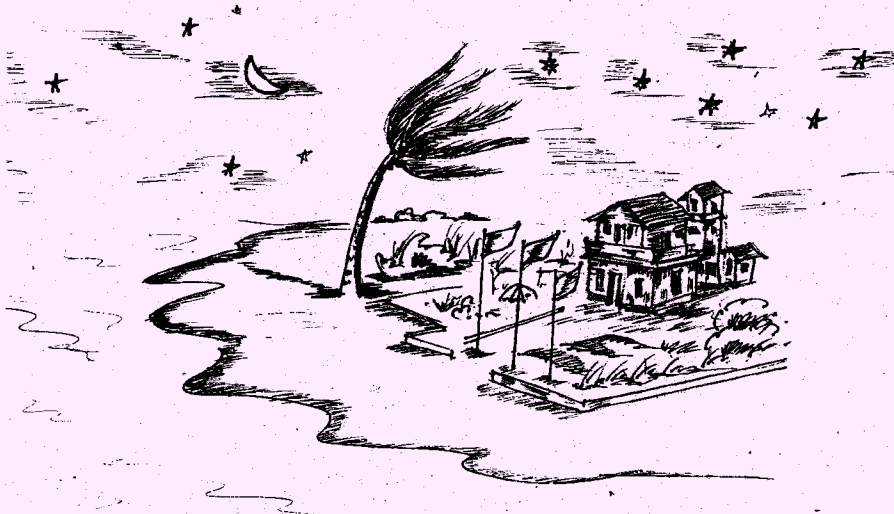
Activity -1

A student tested the water absorbing capacity of gravel and soil using glass, dropper, cloth piece and coconut shell with a hole at the bottom.

- (a) What are the precautions to be taken to get the correct result?
- (b) Write any two factors that influence the water absorbing capacity of soil?
- (c) Write the name of any throw away substance that does not decompose easily in the soil.

Activity - 2

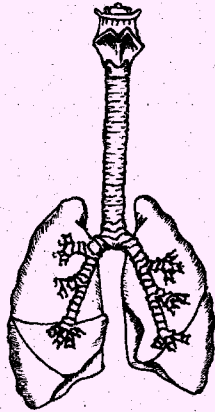
Observe the picture of a night scene on a seashore in Kerala.



- (a) Analyse the picture and find out the mistakes, if any.
- (b) Explain the wind experienced in the equatorial region based on the phenomenon of thermal expansion of gases.
- (c) From where to where does the sea breeze blow?

Activity - 3

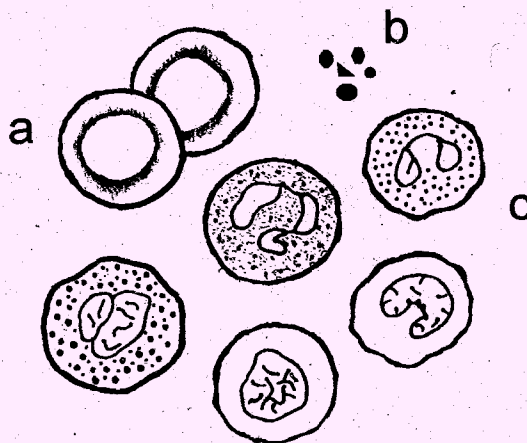
(a) Complete the table given below.

Inhaled air		Exhaled air
Oxygen a. %		Oxygen 15%
Carbon dioxide 0.04 %		Carbon dioxide b. %
Nitrogen c. %		Nitrogen 78%
Water vapour 0.96 %		Water vapour d. %

- (b) Is there any difference in the quantity of oxygen and carbon dioxide in inhaled and exhaled air? Why?
- (c) What happens if we blow air through clear lime water using a straw?

Activity - 4

Observe the pictures of the blood cells given below?



- (a) Identify the blood cells (a,b,c)
- (b) Which blood cell contains Haemoglobin?
- (c) What is the main function of Haemoglobin?

Activity - 5

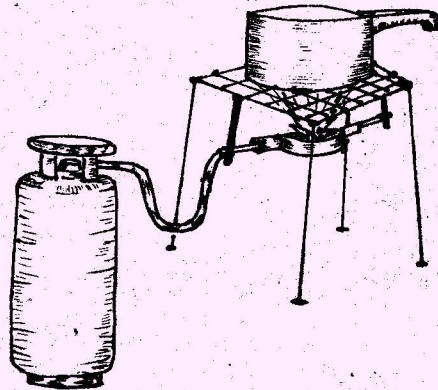
The observations of a class room activity are given in the table below.

Substance tested	Colour change
Lime juice	Turns blue litmus to red
Lime water	Turns red litmus to blue
Pure water	No colour change
Vinegar	Turns blue litmus to red
Solution of ash	Turns red litmus to blue
Salt water	No colour change

- Classify the substances in the table appropriately.
- What is the P^H value of substances that do not show any colour change?
- Give an example for neutralization.

Activity - 6

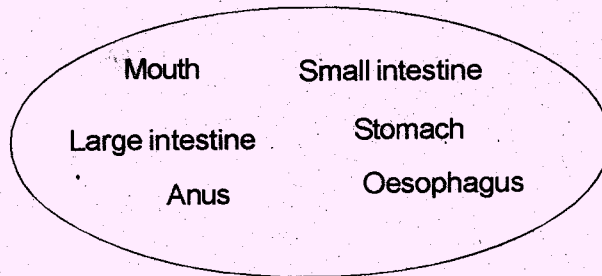
Observe the picture



- What are the different types of heat transfer that occur in the process? Explain?
- What is the reason for using non-conductors for making handles of pans?
- How is heat mainly transferred in liquids and gases?

Activity - 7

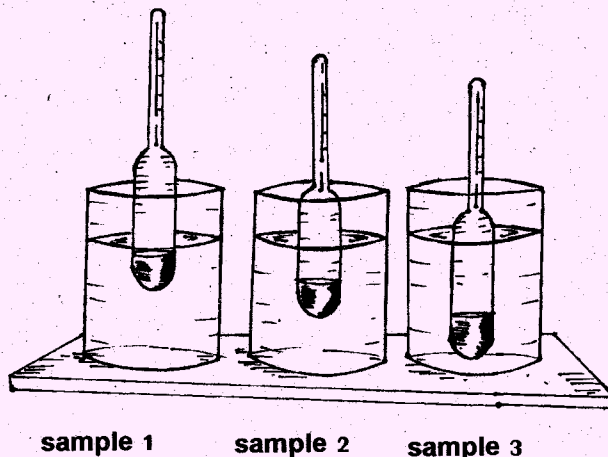
Some organs of our digestive system are given below



- Prepare a flow chart of the digestive system using the organs given above.
- Name the part of the digestive system where the digestion is completed?
- Name the part of the digestive system which absorbs major part of water?

Activity - 8

The picture below shows a test to find out whether water is added to three samples of milk.



- Which of the three samples is the purest? Why?
- Which instrument is used to measure the quality of milk?
- What are the ways in which we can find out adulteration in milk?

Activity - 9

- Why do tender mangoes kept in salt water shrink? Explain it on the basis of the scientific principle involved?
- What is the modern method of preserving milk? Explain?
- Write two other methods of preserving food items?