



I. Fill in the blanks:-

1. An acid is _____ by a base .
2. Phenolphthalein is an _____ indicator.

II. Choose the correct option:-

1. A Soap Solution is –
a) Basic b) Acidic c) Alkaline d) Neutral
2. $\text{CO}_2 + \text{H}_2\text{O} \rightarrow$
a) Sulphuric acid b) Nitric acid c) Carbonic acid d) None

III Name the following:-

1. Soluble bases.
2. A Chemical used as a food preservative.
3. Chemical name of Chile Salt Petre.

IV Define the following:-

1. Acid Rain
2. Neutralisation Reaction
3. Acid-Base Indicator

V Give Reasons:-

1. Non Metal Oxides are called Acidic .
2. Metal Oxides are Basic
3. Sour things are not kept in metal pots
4. Metal Oxides such as MgO are used for making refractory bricks.

VI Write one use of the following:-

1. Sulphuric acid.
2. Citric acid
3. Sodium Carbonate
4. Potassium Nitrate
5. Calcium phosphate

Q1. Fill in the blanks:

- (i) The taking in of air rich in oxygen into the body is called _____ and giving out of air rich in carbon dioxide is known as _____.
- (ii) Yeast are _____ organisms and they respire _____.
- (iii) A breath means one _____ plus one _____.
- (iv) A large muscular sheet called _____ forms the floor of chest cavity.
- (v) Accumulation of _____ causes muscle cramps.
- (vi) The process of release of energy by breakdown of food is called _____.
- (vii) All living organisms respire to get _____ from food, which can be utilised for various _____ processes.
- (viii) The two steps of aerobic respiration are _____ & _____.
- (ix) Main organs of human respiratory system in sequence are: Nostrils, _____ cavity, (windpipe), _____, lungs, _____.

Q.2. Choose the correct option:

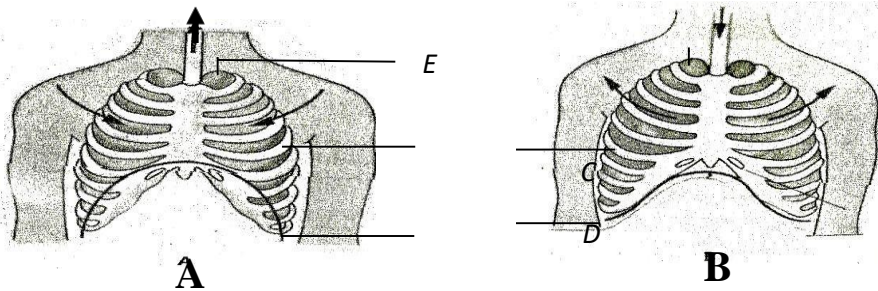
(i) During cellular respiration (aerobic), glucose is broken down into:

- (a) Alcohol , CO₂, energy
- (b) CO₂ & energy CO₂& Water
- (c) CO₂, energy & water

(ii) In which of the following cases will the rate of breathing be slowest:

- (a) Reading
- (b) Eating
- (c) Sleeping
- (d) Brisk walking

Q4. Observe the given figure & answer the following questions



(i) Given figure represents _____.

(ii) Which of following figures A or B , represents inhalation?

(iii) Label C, D, E.

(iv) Complete the table showing the mechanism of breathing.

MECHANISM	DURING INHALATION	DURING EXHALATION
Ribs move	_____ & outward	Down & _____
Diaphragm moves	_____	_____
Chest cavity	_____	_____
Air	Rushes into lungs	Pushed _____ of lungs

Q3. Name the organ of respiration in the following-

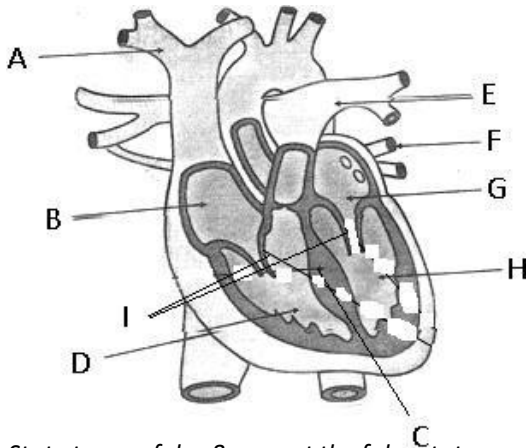
- (i) Cockroach
- (ii) Earthworm
- (iii) Human beings
- (iv) Fish
- (v) Whales & Dolphins
- (vi) Birds
- (vii) Snake
- (viii) Lizard
- (ix) Plants
- (x) Lion

Q.4. Match the following –

- (i) W.B.C.
- (a) Chambers of Heart

- | | |
|---------------------------|--|
| (ii) Veins | (b) Red pigment of blood which carries oxygen in blood |
| (iii) Haemoglobin | (c) William Harvey |
| (iv) Stethoscope | (d) CO ₂ rich blood |
| (v) Ventricles | (e) Heart beat |
| (vi) Circulation of blood | (g) Fluid part of blood |
| (vii) Plasma | (f) Fight germs |

Q5. Label the diagram showing sections of human heart.



Q6. State true or false & correct the false statement.

- (i) Xylem conducts food in plants.
 - (ii) Transpiration is responsible to pull water to great heights in tall trees.
 - (iii) All the water absorbed by plant is utilized by the plant.
 - (iv) Transpiration cools the plant.
- Leaves help in absorption of water in plants.

Q.7 Classify the following changes as physical or chemical changes –

- | | |
|-------------------------|---------------------------|
| Burning of sugar | Melting of butter |
| Souring of milk | Drying of wet hair |
| Mixing lime with water, | Growth of plants to trees |
| Spoiling of food | Bursting of crackers |
| Cutting of vegetables | |

Q.8. Name the following:

- (i) The gas evolved when vinegar is reacted with baking soda.
- (ii) Any 3 alloys from your daily life.
- (iii) Two factors which cause rusting.
- (iv) An example of a chemical change in which there is a change of colour.