

# WORKSHEET 2

## CHAPTER 6 – RESPIRATION IN PLANTS

### A. Name the following.

1. End product of anaerobic respiration in animals.
2. Opening present on the stems of woody plants for exchange of gases.
3. Cycle in which pyruvic acid undergoes oxidation.
4. Site of glycolysis.
5. End products of anaerobic respiration in plants.

### B. Fill in the blanks.

1. The end product of glycolysis is \_\_\_\_\_
2. \_\_\_\_\_ is a chemical which absorbs oxygen from the air.
3. The by-products of normal respiration are \_\_\_\_\_ and \_\_\_\_\_
4. The inner membrane of mitochondria is folded into finger-like projection called \_\_\_\_\_
5. Alcoholic fermentation occurs in \_\_\_\_\_

### C. Match the items in Column A with those in Column B and write down the matching pairs.

#### Column A

1. Ethanol
2. Glycolysis
3. Photosynthesis
4. Krebs cycle
5. Lactic acid

#### Column B

- a. anabolic process
- b. mitochondria
- c. muscle cell
- d. yeast
- e. cytoplasm

### D. State whether the following statements are True or False.

1. Respiration is a single step biochemical process.
2. End products of aerobic respiration are carbon dioxide and water.
3. Respiration is a faster process than combustion.
4. Dry weight of plant increases in the process of respiration.
5. Krebs cycle is common to both aerobic and anaerobic respiration.

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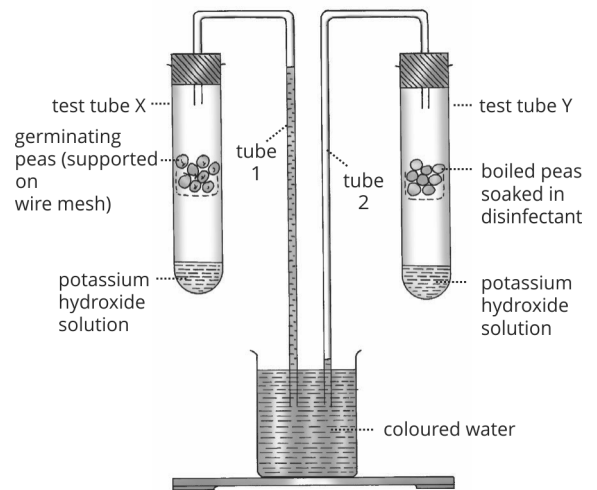
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**E. The diagram given alongside refers to an apparatus which is used to demonstrate physiological process.**

1. What is the purpose of keeping potassium hydroxide solution in test tube X and Y?
2. Why are boiled peas soaked in a disinfectant kept in test tube Y?
3. What makes coloured water rise in tube 1?
4. Name the biological process which causes the above rise.
5. Define the biological process shown in the experiment.



# ANSWERS

## WORKSHEET 2

### A. Name the following.

1. Lactic acid
2. Lenticels
3. Krebs cycle
4. Cytoplasm
5. Ethanol and carbon dioxide

### B. Fill in the blanks.

1. pyruvic acid
2. Pyrogallic acid
3. carbon dioxide and water vapour
4. cristae
5. yeast

### C. Match the items in Column A with those in Column B and write down the matching pairs.

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. d. | 2. e. | 3. a. | 4. b. | 5. c. |
|-------|-------|-------|-------|-------|

### D. State whether the following statements are True or False.

- |          |         |          |          |          |
|----------|---------|----------|----------|----------|
| 1. False | 2. True | 3. False | 4. False | 5. False |
|----------|---------|----------|----------|----------|

### E. The diagram given alongside refers to an apparatus which is used to demonstrate physiological process.

1. Potassium hydroxide absorbs carbon dioxide produced during respiration.
2. Boiled peas are soaked in disinfectant to prevent the bacterial growth in test tube Y. Otherwise there might be bacterial growth in test tube Y which will give inaccurate result due to bacterial respiration.
3. The germinating peas respire and use up oxygen in the test tube X and tube 1 which creates a vacuum in the tube. Thus, coloured water rises in tube 1.
4. Respiration.
5. Respiration is a catabolic process of releasing energy from simple sugar like glucose to carry out life processes.