## Life Processes - Class X - Paper Set 1

1. Why is diffusion insufficient to meet the oxygen requirements of multicellular organisms like humans?

| a) Lack of surface area  | b) Oxygen diffuses slowly  |  |
|--|--|--|
| c) Small distance for diffusion  | d) All of the above  |  |
| 2. Which process is essential for energy generation in living organisms?               |  |  |
| a) Nutrition   | b) Excretion   |  |
| c) Photosynthesis  | d) Respiration   |  |
| 3. Which type of nutrition involves organisms producing food from inorganic materials? |  |  |
| a) Heterotrophic   | b) Autotrophic   |  |
| c) Parasitic   | d) Saprotrophic  |  |
| 4. What is the main site of carbohydrate digestion in the human body?                  |  |  |
| a) Stomach   | b) Mouth   |  |
| c) Small intestine   | d) Large intestine   |  |
| 5. Which substance breaks down large fat molecules in the small intestine?             |  |  |
| a) Bile salts  | b) Saliva  |  |
| c) Gastric juice   | d) Amylase   |  |
| 6. The main function of alveoli in the lungs is:                                       |  |  |
| a) Absorption of water   | b) Gaseous exchange  |  |
| c) Filtration of blood   | d) Absorption of nutrients   |  |
| 7. Which structure in plants is primarily responsible for water transport?             |  |  |
| a) Phloem  | b) Xylem   |  |
| c) Stomata   | d) Cuticle   |  |
|  | <ul> <li>c) Small distance for diffusion</li> <li>Which process is essential for energy generation in <ul> <li>a) Nutrition</li> <li>c) Photosynthesis</li> </ul> </li> <li>Which type of nutrition involves organisms produce <ul> <li>a) Heterotrophic</li> <li>c) Parasitic</li> </ul> </li> <li>What is the main site of carbohydrate digestion in <ul> <li>a) Stomach</li> <li>c) Small intestine</li> </ul> </li> <li>Which substance breaks down large fat molecules <ul> <li>a) Bile salts</li> <li>c) Gastric juice</li> </ul> </li> <li>The main function of alveoli in the lungs is: <ul> <li>a) Absorption of water</li> <li>c) Filtration of blood</li> </ul> </li> <li>Which structure in plants is primarily responsible and phoem</li> </ul> |  |

8. The removal of nitrogenous waste from the human body is called:

| a) Digestion | b) Excretion |
|--------------|--------------|
|--------------|--------------|

c) Photosynthesis d) Respiration

## 9. What is the role of hemoglobin in respiration?

- a) To transport carbon dioxide b) To carry oxygen
- c) To remove waste products d) To absorb nutrients
- 10. Which structure in the nephron filters blood to form urine?

| a) Glomerulus | b) Alveolus |
|---------------|-------------|
| c) Phloem     | d) Stomata  |

## Answers:

- 1. d) All of the above
- 2. d) Respiration
- 3. b) Autotrophic
- 4. c) Small intestine
- 5. a) Bile salts
- 6. b) Gaseous exchange
- 7. b) Xylem
- 8. b) Excretion
- 9. b) To carry oxygen
- 10. a) Glomerulus