**Karan Arora** **R.L. Chemistry Classes M: 99968-68554**

**Max Time : 1 hr** **Class = 10th Science Test**  **Max Marks : 25**

**LIFE PROCESS [RESPIRATION]**

1. Multiple choice questions : [ 1 X 4 = 4 ]
2. Which of the following is the correct equation for aerobic respiration in humans?

|  |  |
| --- | --- |
| a) C₆H₁₂O₆ → C₂H₅OH + CO₂ + Energy | b) C₆H₁₂O₆ + O₂ → CO₂ + H₂O + Energy |
| c) C₆H₁₂O₆ → Lactic acid + Energy | d) C₆H₁₂O₆ + H₂O → CO₂ + Alcohol |

1. What is the main end product of anaerobic respiration in yeast?

|  |  |
| --- | --- |
| a) Lactic acid only | b) Carbon dioxide only |
| c) Alcohol and Carbon dioxide | d) Water and Carbon dioxide |

1. During vigorous exercise, muscles perform:

|  |  |
| --- | --- |
| a) Aerobic respiration | b) Anaerobic respiration |
| c) Both Aerobic and Anaerobic respiration | d) Only breathing |

1. The breakdown of Pyruvate to give carbon dioxide water and energy takes place in:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Cytoplasm | b) Mitochondria | c) Chloroplast | d) Nucleus |

1. The energy currency of the cell is:

|  |  |  |  |
| --- | --- | --- | --- |
| a) DNA | b) Glucose | c) ATP | d) Oxygen |

1. Why does lack of oxygen in muscles often leads to cramps among cricketers. [ 1 ]
2. In which form the oxygen and carbon dioxide is carried to the tissue and moves out of the blood respectively. [ 1 ]
3. How are the lungs designed in human beings to maximise the area for exchange of gases. [ 2 ]
4. What are the difference way in which a glucose molecule is oxidized to produce energy in various organisms. [ 3 ]
5. Differentiate between aerobic respiration and anaerobic respiration. [ 3 ]
6. Explain the mechanism of breathing in humans. Include the roles of diaphragm and rib muscles.

[ 5 ]

1. Draw a diagram of human respiratory system and label the following parts: [ 5 ]

Pharynx, trachea , lungs , diaphragm and alveoli.