Case study based questions

Chapter 6 - Life Processes

Rishaan experienced muscular cramps during the training session for his upcoming football match. Mr. Sen, his coach advised him on a schedule of some aerobic exercises to overcome his problem of muscular cramps. Rishaan followed his coach's advice and did not face the problem of muscular cramps again during his match

Q 1. Which life process is depicted by the above passage?

1. Respiration
2. Digestion
3. Nutrition
4. Excretion

Q 2. Lack of oxygen in muscles often leads to cramps due to

1. Conversion of pyruvate to ethanol
2. Conversion of glucose to pyruvate
3. Conversion of pyruvate to glucose
4. Conversion of pyruvate to lactic acid

Q 3. Is lactic acid produced by anaerobic respiration in yeast?

1. Yes
2. No

Q 4. Is carbon dioxide produced by anaerobic respiration in yeast?

1. Yes
2. No

Q 5. Why there is an increase in lactic acid concentration in the blood at the beginning of the exercise?

1. Lack of oxygen
2. Excess of oxygen
3. Yack of carbon dioxide
4. Excess of carbon dioxide

Blood transport food and waste materials in our bodies. It consists of plasma as a liquid medium. (pumping organ is required to push the blood around. The blood flows through the chambers of the organ in a specific manner and direction. While flowing throughout the body, blood exert a pressure against the wall or a vessel.

Q 1. Which life process is depicted by the above passage?

1. Respiration
2. Digestion
3. Transportation
4. Excretion

Q 2. Lame the blood pumping organ.

1. Lungs
2. Heart
3. Kidney
4. None of the above

Q 3. oxygenated blood from lungs enters left atrium through .....

1. Vena cava
2. Pulmonary artery
3. Pulmonary vein
4. aorta

Q 4. Deoxygenated blood leaves through the right ventricle through .....

1. Vena cava
2. Pulmonary artery
3. Pulmonary vein
4. aorta

Q 5. Which of the following statements is true about heart?

j It is a hollow muscular organ.

ij It is a four chambered having three atria and one ventricle.

iij It has different chambers to prevent the oxygen - rich blood from mixing with the blood containing carbon dioxide.

Iv Arteries always carry blood away from the heart.

A) i and ii
B) ii and iii
C) i, ii and iii
D) i, iii and iv