

Course Name : Bachelor of Physical Education

Year : IIInd

Paper Name : Kinesiology and Physiology of Exercise

Paper No. Ist

Lecture No. 11

Topic no. : Sec - D(1)

Lecture Title : The Cardio – Respiratory System and Exercise - II

F.A.Q

Q1. What is cardiac Hypertrophy ?

A1. This is characterized by an increase in the size of the left ventricular cavity and a modest increase in the size of the left ventricular cavity and a modest increase in wall thickness. An increase in total blood volume may contribute to cardiac hypertrophy.

Q2. What are the Short Term Effects of Exercise ?

A2. When we begin to exercise the body has to respond to the changes in activity level in order to maintain a constant internal environment. Circulatory system – release of adrenaline causes the heart rate to rise. Increase Cardiac Output.

Respiratory system- changes in the concentration of CO₂ and O₂ in the blood are detected by the respiratory centre which increases the rate of breathing.

Q3. What are the Long Term Effects of Exercise ?

A3. Regular exercise results in adaptations to the circulatory, respiratory and muscular system in order to help them perform better under additional stress. Circulatory system – the cardiac muscles surrounding the heart hypertrophies, resulting in thicker, stronger walls and therefore increase in heart volumes. The number of red blood cells increases, improving the body's ability to transport Oxygen to the muscles for aerobic energy production.

Q4. Describe the gas exchange in lungs ?

A4. Gas exchange happens in the alveoli and is the process of supplying the blood with oxygen and removing carbon dioxide, a waste product of cell respiration. Without gas exchange, oxygen would not get into the blood and there would be a build-up of carbon dioxide in the body.

Q5. What are the causes of diabetes ?

A5. One of the causes of Diabetes type 2 is obesity. It damages the blood vessels by narrowing and blocking them, which can cause strokes due to oxygen starvation in the brain. Exercise aids weight loss which in turn will reduce the risk of diabetes type-2