

Course Name : Bachelor of Physical Education

Year : IInd

Paper Name : Kinesiology and Physiology of Exercise

Paper No. Ist

Lecture No. 10

Topic no. : Sec - D(1)

Lecture Title : Cardio – Respiratory System and Exercise Part - I

F.A.Q

Q1. What is the respiratory System to exercise ?

A1 Consisting of a series of body part including the lungs, diaphragm and nasal cavity, the respiratory system is responsible for transporting oxygen and carbon – dioxide to and from muscles and tissues.

Q2. What is oxygen transport ?

A2. To meet the increasing oxygen demand from the working muscles, additional oxygen must be transported through the blood vessels. During exercise, the sympathetic nerve stimulates the veins to constrict to return more blood to the heart. This blood is carrying carbon-dioxide from the muscles and can increase the total stroke volume of the heart by 30 to 40 percent.

Q3. What are long term effects of exercise.

A3. There will be increase capacity and effectiveness of lungs, faster gaseous exchange from carbon – dioxide to oxygen. Body will be more efficient using oxygen.

Q4. What are the factors that define effects of exercise on the respiratory system ?

A4. It depends on the pre- existing respiratory parameters and levels of blood gases before and after exercise.

Q5. What are the effects of over breathing at rest ?

A5. Over breathing at rest reduces their body- oxygen levels. Many people with diabetes, cancer, heart disease, chronic fatigue and many other conditions have elevated blood lactate level at rest, indicating the prence of cell hypoxia and anaerobic cellular respiration.