

Princess Nora Bint Abdul Rahman University

College of Home Economics

Department of nutrition and food science

MBS 343

Exercise Physiology

1st Midterm exam

2012-2013

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Student name:-----

Student ID number: -----

I Multiple choice question:

(5 points)

Choose only the **one** most appropriate answer:

1. A body movement produced by muscle action that increases energy expenditure is the :
 - a. Biomechanics
 - b. Physical Activity
 - c. Exercise physiology
 - d. Kinesiology
 - e. None of the above

2. Type 1 skeletal muscles fibers are:
 - a. Suitable for anaerobic exercise
 - b. High activity of myosin ATPase
 - c. Fatigue easily
 - d. Both a & b
 - e. None of the above

3. The general feature of skeletal muscles are:
 - a. Involuntary and striated
 - b. found in one place
 - c. Voluntary and surround the body's internal organs
 - d. Voluntary and striated
 - e. non-striated and voluntary

4. Exercise physiology is a separate field of study from physiology because of its focus on:
 - a. biology and chemistry
 - b. consequences of movement
 - c. functional dynamics
 - d. both a & b
 - e. both b & c

5. ATP result from oxidation of :
 - a. carbohydrate
 - b. proteins
 - c. fat
 - d. All of the above
 - e. Both b & d

6. Carbohydrate is taken up by the muscles and liver and converted into:
 - a. glycogen
 - b. Fatty Acids
 - c. Amino Acids
 - d. Glucose
 - e. Body fat

7. Fat oxidation requires than carbohydrate oxidation:
 - a. less oxygen and generates more energy
 - b. more oxygen and generates less energy
 - c. less oxygen and generates less energy
 - d. more oxygen and generates more energy
 - e. oxygen only when it needed

8. During Recovery the is increased in blood:
 - a. lactic acid
 - b. ATP
 - c. Cr-P
 - d. muscle glycogen
 - e. All of the above

9. It is the volume of air remaining in the lungs after maximal expiration:
 - a. Inspiratory Reserve volume
 - b. Tidal volume
 - c. Residual volume
 - d. Total lung capacity
 - e. Functional Residual capacity

10. Vo_2 max can be:
 - a. Increase with age
 - b. Affected by cardiac problem
 - c. Increase with training
 - d. Have a direct relation with lung diseases
 - e. All of the above

Bonus question:

Feeling of weakness, hunger and dizziness after long time of exercise are all symptoms of:

- a. Insufficient glycogen
- b. High concentration of glucose
- c. Decrease in carbohydrates
- d. Increase of blood sugar
- e. Decrease of glucose in the blood

II true or false question:

(10 points)

- 1) Planned, structured, repetitive, and purposeful physical activity is called exercise.
- 2) One of the skeletal muscles layers is Sarcolemma.
- 3) Mitochondrion is intracellular fluid in which ATP synthesis is taken place.
- 4) Myofibril is a cylindrical bundle of contractile filaments with in the skeletal muscles cell
- 5) Lifting a heavy weight need phosphagen system only.
- 6) Exercise physiology determines how the body response in function and structure to acute exercise stresses only.
- 7) Nutrients that give us energy are Glucose, Fatty acids, and Amino Acids.
- 8) During Oxidative Energy System the glucose is breakdown into pyruvic acid.
- 9) Exchange of oxygen and carbon dioxide takes place within the alveoli.
- 10) Kyphosis is one of the factors affecting vital capacity in the lung.

III List up to six points about the common characteristics of aerobic or Oxidative Energy System: (5 points)