

C 82628

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Name.....

Reg. No. **15**.....

SECOND YEAR B.P.E. DEGREE EXAMINATION, APRIL 2015

Paper VII—PHYSIOLOGY AND PHYSIOLOGY OF EXERCISE

(2013 Admissions)

Time : Three Hours

Maximum : 75 Marks

Answer any **three** questions from Part A and **two** questions from Part B.

Question 8 is compulsory.

Part A

1. Define enzyme and explain their mode of digestive action.

(15 marks)

2. Explain the effect of exercise on :—

(a) Circulatory system.

(b) Muscular system.

(c) Respiratory system.

3. (A) Match the following :—

1 Sphygmomanometer	— SA node.
2 Glycolysis	— Hypothalamus.
3 Spirometer	— Myosin.
4 Skin fold caliper	— Muscle.
5 Tidal volume	— Blood pressure.
6 Hypothermia	— Break down of glucose.
7 Pacemaker	— Measuring body fat.
8 ATP Stored	— Vital capacity.
9 Cross bridges	— Elevated body temperature.
10 Temperature regulation	— Volume of air.

(10 marks)

(B) Fill in the blanks :—

(a) Number of ATP generated through Krebs Cycle _____.

(b) Name the structural unit of nervous system _____.

Turn over

- (c) The amount of air inspired or expired in one minute ———.
- (d) Name the outer connective tissue covering the entire muscle ———.
- (e) Blood is oxygenated in ———.

(5 marks)

4 Explain :—

- (a) Neuromuscular junction.
- (b) Pancreas.
- (c) Cardiac cycle.

(15 marks)

5. Explain :—

- (a) ATP.
- (b) Characteristics of muscle.
- (c) Transfer of body heat.

(15 marks)

Part B

- 6. (a) Give a brief description of different type of muscle.
- (b) Discuss the physical and chemical changes that occur during muscle contraction.

(2 × 7½ = 15 marks)

7. Describe Briefly :—

- (a) Comparison between fat and carbohydrate metabolism.
- (b) Mechanism of respiration.
- (c) Factors affecting strength.

(15 marks)

8. Write short note on any *five* of the following :—

- (a) Muscle tone.
- (b) Cerebrum.
- (c) Second Wind.
- (d) Tidal volume.
- (e) Pulse rate.
- (f) Bile.
- (g) Oxygen debt.

(5 × 3 = 15 marks)