

20BP22

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Name:

Reg. No:

SECOND YEAR B.P.Ed. DEGREE EXAMINATION, APRIL 2022

(Regular/Supplementary/Improvement)

CC15U BPE2 T7 - PHYSIOLOGY AND PHYSIOLOGY OF EXERCISE

(2015 Admission onwards)

Time: Three Hours

Maximum: 75 Marks

Answer any *three* questions from **Part A**.
Any *one* question from **Part B**. Questions from **Part C** is compulsory.

Part A

1. Explain the effect of exercise on circulatory, respiratory and muscular systems.
(1 × 15 = 15 Marks)

2. Explain types of circulations:
(a) Systemic circulation.
(b) Coronary circulation.
(c) Pulmonary circulation.

(3 × 5 = 15 Marks)

3. (A) Match the Following:

- | | | |
|---------------------|---|----------------------------------|
| 1) Insulin | - | Skin |
| 2) Thermoregulation | - | Breakdown of glucose |
| 3) Pacemaker | - | Vital capacity |
| 4) Stadiometer | - | Uses energy to breakdown |
| 5) Glycolysis | - | Temperature |
| 6) Adipose tissue | - | Require energy to grow and build |
| 7) Actin and Myosin | - | Heart |
| 8) Spirometer | - | Pancreas |
| 9) Catabolism | - | Height |
| 10) Anabolism | - | Protein |

(10 × 1 = 10 Marks)

(B) Fill in the Blanks:

- (a) Fundamental units of the brain are called _____
- (b) The amount of air that enters the lungs per minute is called _____
- (c) Protein in Red Blood Cells are called _____
- (d) _____ converts the chemical energy to mechanical energy generating force and movement.
- (e) The equipment used to measure blood pressure is called _____

(5 × 1 = 5 Marks)

4. Explain:

- (a) Muscle tone.
- (b) Pulmonary respiration.
- (c) Salivary Glands.

(3 × 5 = 15 Marks)

5. Explain:

- (a) Osmotic regulation.
- (b) Ultra-filtration.
- (c) Functions of Cerebrum.

(3 × 5 = 15 Marks)

PART B

6. (a) Briefly explain the metabolism of carbohydrates.
(b) Explain the types of muscles and characteristics of muscles.

(2 × 7 ½ = 15 Marks)

7. Describe briefly:

- (a) Gas exchange in lungs.
- (b) Classification and mode of actions of digestive enzymes.
- (c) Physiological aspects of conditioning.

(3 × 5 = 15 Marks)

Part C

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

- (a) Fatigue.
- (b) Gall bladder.
- (c) Ionic regulation.
- (d) Oxygen debt.
- (e) Second wind.
- (f) Tidal volume.
- (g) Alveoli.
- (h) Minute ventilation.

(5 × 3 = 15 Marks)
