Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with A++Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor of Physical Education Arrear Examination – May 2024
I Semester

Batch : 2023 **Time : 3 Hours**
Major : B.P.Ed. **Max. Marks : 100**

23BPDC02 Anatomy and Physiology and Exercise Physiology

Course Outcomes:
CO1: Understand the basic principles of anatomy and exercise physiology
CO2: Apply the knowledge in the field of Physical Education and movement activity
CO3: Analyse the practical knowledge of anatomy physiology and Exercise physiology in the practical situation
CO4: Remember and recall structure and functionsto correct with exercise physiology
CO5: Apprise the effect of exercise during training and practical sessions

Part A **10 x 1 = 10**
Choose the Correct Answer

1. In anatomical structure, our body is divided by means of medial and lateral is through CO2 K2
   a. Transverse b. Superior c. Midline d. Anterior

2. The muscles which are not under the control of our will is CO3 K2
   a. Skeletal muscle b. Cardiac muscles
   c. Non-striated muscles d. Striated muscles

3. The components of blood cell made in the bone marrow is CO1 K3
   a. Plasma b. Red blood cells c. White blood cells d. Platelets

4. Stroke volume x Heart rate is CO3 K3
   a. Cardiac cycle b. Cardiac Out put
   c. Cardiac index d. Blood pressure

5. During exercise if Heart rate rises, what happens to Cardiac output? CO3 K4
   a. Increases b. Decreases
   c. Stays normal d. Stays abnormal

6. A measurement of the amount of air that enters the lungs per minute is known as CO4 K2
   a. Lung capacity b. Tidal volume
   c. Minute ventilation d. Oxygen debt

7. When we do exercise more --------- must be removed from muscles. CO3 K3
   a. Oxygen b. Carbondioxide c. Carbon monoxide d. Nitrogen

8. The ATP- PC system mostly works during CO3 K3
   a. Low intensity exercise b. High Intensity exercise
   c. Warm up d. Warm down

9. It requires constant supply of ATP for energy either from aerobic or anaerobic metabolism CO4 K2
   a. Muscular activity b. Respiratory activity
   c. Circulatory activity d. Nervous activity

10. During exercise if Heart rate rises, what happens to Cardiac output? CO2 K4
    a. Increases b. Decreases
    c. Stays normal d. Stays abnormal

Part B **5 x 6 = 30**

Answer ALL questions

Each answer should not exceed 400 words or two pages

11. a. Draw a neat Diagram of cell and explain its parts.	CO1 K2
(or)	
11.b. Describe about the types of muscles.	CO3 K3
12.a. Describe the functions and transfusion of blood.	CO2 K3
(or)	
12.b. Write short notes on Cardiac Output and Cardiac Cycle.	CO4 K3
13.a. Describe the Mechanism of Respiration.	CO2 K2
(or)	
13.b. Draw a neat Diagram of Digestive system and label its parts.	CO3 K4
14.a. Write short notes on Minute Ventilation and oxygen debt.	CO3 K4
(or)	
14.b. Elaborate the mechanics of breathing.	CO3 K4
15.a. What is ATP-PC system of metabolism?	CO2 K2
(or)	
15.b. What is Anaerobic metabolism?	CO3 K3

Part C **5 x 12 = 60**

Answer ALL questions

Each answer should not exceed 800 words or four pages

16. a. Enumerate the need and importance of Anatomy and Physiology in the field of Physical Education.	CO2 K4
(or)	
16.b. Explain about joints with example.	CO2 K2
17.a. Draw a neat diagram of heart and explain its functions and circulation.	CO3 K3
(or)	
17.b. Explain about blood and grouping system of blood.	CO3 K4
18.a. Explain about lungs with diagram and explain about lung volumes.	CO2 K3
(or)	
18.b. Explain about the structure and functions of Digestive system.	CO3 K4
19.a. Explain about Aerobic and Anaerobic Systems during Rest and Exercise.	CO4 K3
(or)	
19.b. Explain about High intensity exercise and its effect on energy transfer.	CO3 K4
20.a. Explain the effect of exercises and training on the respiratory system.	CO2 K3
(or)	
20.b. Enumerate the effect of exercises and training on the Cardio vascular system.	CO2 K3

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