



K. Sambath

Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65 /4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Bachelor of Physical Education Degree Examination – November 2025 I Semester

Class: I B.P.Ed.

Time : 3 Hours

Max. Marks : 100

23BPDC02 Anatomy and Physiology and Exercise Physiology

Course Outcomes:

- CO1: Understand the basic principles of anatomy, physiology and exercise physiology
CO2: Apply the knowledge in the field of physical education and movement activity
CO3: Analyze the practical knowledge of anatomy, physiology and exercise physiology in the practical situation
CO4: Remember and recall the structure and functions to correlate with exercise physiology
CO5: Appraise the effects, exercises during training and practical sessions

Part A Choose the Correct Answer

10 x 1 = 10

- How many pairs of ribs are present in the human body?
a. 10 Pairs b. 11 Pairs c. 12 Pairs d. 15 Pairs CO1 K2
- Which type of joint is the shoulder joint?
a. Fibrous b. Cartilaginous c. Immoveable d. Ball & Socket CO2 K1
- Name the functional unit of the kidney.
a. Renal Tubule b. Nephron c. Renal cortex d. Renal Medulla CO2 K2
- What is the universal donor blood group?
a. A b. B c. O d. AB CO1 K1
- Which gland is called the "master gland"?
a. Thyroid b. Thymus c. Liver d. Pituitary CO1 K2
- Which nervous system controls involuntary actions?
a. Peripheral nervous system b. Autonomic nervous system
c. Central nervous system d. Cross nervous system CO2 K2
- What is the full form of ATP?
a. Adenosine Triphosphate b. Amino Triphosphate
c. Adenosine Two phosphate d. Adenosine Tri plates CO1 K1
- Name the primary fuel for muscular activity.
a. Protein b. Fat c. Acid d. Glucose CO2 K2
- What is the normal resting heart rate of an adult?
a. 70 beats/minute b. 78 beats/minute c. 72 beats/minute d. 80 beats/minute CO1 K1
- What type of diet is recommended before competition?
a. Low carbs diet b. High carbs diet c. Medium carbs diet d. No carbs CO2 K2

Part B**5 x 6 = 30****Answer ALL questions****Each answer should not exceed 400 words or two pages**

- 11.a. Explain the functions of the skeleton. **CO2 K2**
(or)
- 11.b. Describe types of tissue. **CO3 K3**
- 12.a. Brief the mechanism of respiration. **CO3 K3**
(or)
- 12.b. Describe the cardiac cycle briefly. **CO2 K2**
- 13.a. Draw the human ear and label it all parts. **CO3 K3**
(or)
- 13.b. Write short notes on reflex action. **CO1 K2**
- 14.a. Define Exercise Physiology and explain its importance. **CO2 K2**
(or)
- 14.b. Write notes on oxygen debt and second wind. **CO3 K3**
- 15.a. Brief about effect of exercise on the cardiovascular system. **CO3 K3**
(or)
- 15.b. Describe the effect of exercise on respiratory system **CO3 K3**

Part C**5 x 12 = 60****Answer ALL questions****Each answer should not exceed 800 words or four pages**

- 16.a. Discuss the functions of different types of Joints **CO5 K5**
(or)
- 16.b. Analyse the role of joints in sports performance with examples. **CO4 K4**
- 17.a. Explain the structure and functions of the heart with a diagram. **CO4 K4**
(or)
- 17.b. Evaluate the importance of lung volumes in sports performance. **CO5 K5**
- 18.a. Analyse the structure and functions of the digestive system in detail. **CO4 K4**
(or)
- 18.b. Evaluate the importance of nervous system in sports performance. **CO5 K5**
- 19.a. Describe the structure, composition and function of skeletal muscles. **CO4 K4**
(or)
- 19.b. Discuss the process of transmission of nerve impulse to muscle contraction. **CO5 K5**
- 20.a. Evaluate the importance of diet before, during and after competition. **CO5 K5**
(or)
- 20.b. Describe the role of warming up, conditioning and fatigue in sports performance. **CO4 K4**
