

B.P.Ed. Examination, 2016
Semester-I
Physical Education
Course: CC-102
(Anatomy and Physiology)

Time: Three Hours

Full Marks: 70

Questions are of equal value or as indicated in the margin
Attempt *any one* question from each Unit-I to Unit-III,
***two* answers from Unit IV and give *ten* answers from Unit-V**

Unit-I

1. What do you mean by Anatomy and Physiology? Discuss its importance in the field of Physical Education and Sport. Draw a neat diagram of cell with its specification.

3+7+5=15

or

What do you mean by Joint? Classify joint on the basis of its structure and function. Write down the different movement possible in freely movable joint.

1+3+3+8=15

Unit-II

2. Write down the function of blood. Draw a diagram of human heart with its specification. What do you mean by circulation? Write down the mechanism of reparation.

3+5+2+5=15

or

Write down the function of Digestive System. Draw a diagram of Digestive Tract. Write down the function of kidney.

6+5+4=15

Unit-III

3. Draw a structure of Skeletal Muscle. Write down its function. What do you mean by 'fuel' with respect to muscular activity? Write down the different procedure for generating fuel for muscular activity.

5+3+3+4=15

or

What do you mean by Synapse? Write down the procedure of "Neural control of Muscular Activity" in detail. Discuss about 'Oxygen Debt' and 'Second Wind'.

2+9+2+2=15

Unit-IV

4. Write short notes on **any two** : (i) Effect of exercise training on Circulatory system (ii) Effect of exercise training on Respiratory system (iii) Effect of exercise training on Muscular system (iv) Diet: Before, During and After competition.

7.5+7.5=15

P.T.O.

(2)

Unit-V

5. Write the correct answer from the following (any ten)

10x1=10

- (i) Mitochondria – (a) Cell (b) Tissue (c) Organ (d) Power house
- (ii) Vertebral column – (a) Skin (b) Heart (c) Lungs (d) Bone Structure
- (iii) Blood cell – (a) RBC (b) WBC (c) a & b both (d) Tissue
- (iv) Oxyhaemoglobin – (a) CO₂ & blood (b) O₂ & RBC (c) Less Oxygen
(d) More Oxygen
- (v) Automatic Nervous System – (a) Anatomy of Nerve (b) Physiology of Nerve
(c) Nerve cell (d) Nerve Tissue
- (vi) Cardiac Cycle – (a) Heart Rate (b) Heart Volume (c) Heart Function (d) Healthy Heart
- (vii) All or None Law – (a) Nerve Function (b) Lung Function (c) Kidney Function
(d) Bone Function
- (viii) ATP-CP System – (a) Aerobic System (b) Oxygen System (c) Anaerobic System
(d) Cell Structure.
- (ix) Muscle Cell – (a) No Mitochondria (b) One Mitochondria (c) Two Mitochondria
(d) Many Mitochondria.
- (x) Athletic Heart – (a) Small Heart (b) Disease Heart (c) Long Heart (d) Healthy Heart.
- (xi) Warm up – (a) Cooling the body (b) Increase body temperature (c) Body Water
(d) Body Balance.
- (xii) Fatigue – (a) Food (b) Fun (c) Fuel (d) Loss of Energy.
