

BACHELOR OF PHYSICAL EDUCATION EXAMINATION, 2023

(1st Year, 1st Semester)

Anatomy and Physiology

PAPER - CC - 102

Time : Three hours

Full Marks : 70

Mention the Question number clearly before writing the answer.

Group - A

Answer **any three** questions.

15×3=45

1. Name the components of the skeletal system. Classify bones in detail with examples. List out the functions of the skeletal system. 2+8+5=15
2. Draw a typical synovial joint and label its parts. Classify the different types of joints. Elaborate the effects of exercise on muscular system. 5+5+5=15
3. Define nephron. Draw and describe the urinary system. Explain the functions of the urinary system and explain its role in sports. 2+6+5+2=15
4. Define vital capacity. Describe different parts of respiratory system. Explain different phases of inhalation and exhalation. 2+7+6=15
5. Classify nervous system. Describe the structural organizations of nervous system. Write the main functions of nervous system. 3+7+5=15

Group - B

Write short notes (**any two**) of the following :

7½×2=15

6. Nucleus
7. Composition and Functions of Blood
8. Mitochondria
9. Endoplasmic reticulum

Group - C

10. Write the correct option (**any ten**) :

1×10=10

i) Liquid connective tissues in the body are

- a) blood and plasma
- c) blood and lymph

- b) blood and saliva
- d) blood and extra cellular fluid

[Turn over

ii) Strongest cartilage is found in the

- a) ear
- b) ribs
- c) intervertebral discs
- d) nose

iii) is the seat of cellular respiration.

- a) Ribosome
- b) Mitochondria
- c) Centrosome
- d) Lysosome

iv) Match the following:

- | | | |
|---------------|---|-------------------------------|
| I. Epiphysis | — | A. middle portion of the bone |
| II. Diaphysis | — | B. end portion of the bone |
| III. Tendon | — | C. muscle to muscle |
| IV. Ligament | — | D. muscle to bone |

Codes:

- | | I | II | III | IV |
|----|---|----|-----|----|
| a) | B | A | C | D |
| b) | B | D | A | C |
| c) | B | D | C | A |
| d) | A | B | D | C |

v) Which of the following organelle is called ‘Suicidal Bag’?

- a) Mitochondria
- b) Endoplasmic reticulum
- c) Lysosome
- d) Ribosome

vi) Combination of haem with O₂ is called

- a) Oxyhaemoglobin
- b) Oxidation
- c) Oxygenation
- d) Oxidized haem

vii) Homeostasis means

- a) Control of internal environment of the body
- b) Adaptation with the environment
- c) Constant environment of the body
- d) All of the above

- viii) Hormone associated with the kidney is
- a) renin
 - b) TSH
 - c) HGH
 - d) oxytocin
- ix) Smallest blood cell is
- a) Small lymphocyte
 - b) Platelet
 - c) RBC
 - d) Neutrophil
- x) The function of nucleolus is
- a) RNA synthesis
 - b) DNA synthesis
 - c) Histone synthesis
 - d) Ribosomal subunit synthesis
- xi) Plasma membrane is composed of
- a) Glycoproteins
 - b) Lipoproteins
 - c) Chromoproteins
 - d) Lipids
- xii) Cell lining the walls of blood vessels is called
- a) Muscular tissue
 - b) Epithelial tissue
 - c) Connective tissue
 - d) Nervous tissue