

QP CODE: 24900144



Reg No:.....

Name:.....

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
FIRST SEMESTER MGU-UGP (HONOURS) REGULAR
EXAMINATION NOVEMBER 2024

First Semester

Discipline Specific Core Course - MG1DSCHPY100 - BASICS OF PHYSIOLOGY

(2024 ADMISSION ONWARDS)

Duration: 2 Hours

Maximum Marks: 50

**Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Interest (I),
Appreciation (Ap), and Skill (S)**

*Students should attempt atleast one question from each course outcome to enhance their overall
outcome attainability.*

[Learning Domain][CO No(s)]

Part A

Multiple Choice Questions

Answer all questions.

Each question carries 1 mark

- 1 Select the main function of lysosome [K] [1]
 - a) Energy production b) Protein synthesis
 - c) Digestion of waste d) Hormone regulation
- 2 The primary purpose of cell signaling is [K] [1]
 - a) To transfer information from b) To maintain structural integrity
 one cell to another
 - c) To generate energy d) To transport nutrients
- 3 The plasma protein responsible for maintaining defense is ----- [K] [2]
 - a) Fibrinogen b) Globulin
 - c) Albumin d) Thrombin
- 4 RBC with abnormal shape is known as ----- [K] [2]

- a) Poikilocytes b) Macrocytes
- c) Microcytes d) Normocytes
- 5 Which of the following is an example of flat bone? [U] [3]
- a) Patellae b) Scapula
- c) Carpals d) Jaw bones
- 6 The structural unit of compact bone is called ----- [U] [3]
- a) Osteoblast b) Osteoclast
- c) Osteocyte d) Osteon

Part B

- | | | | |
|----|---|-----|-----|
| 7 | Explain how the skeletal system contributes to body movement. | [U] | [1] |
| 8 | Enumerate functions of WBC | [U] | [2] |
| 9 | Define osteocytes | [K] | [3] |
| 10 | Define cardiac muscles | [K] | [3] |

Part C

- | | | | |
|----|---|-----|-----|
| 11 | Explain the main functions of the skeletal system and its importance to overall health. | [U] | [1] |
| 12 | Discuss the various types of cell junctions and their specific functions in maintaining tissue integrity. | [U] | [1] |
| 13 | Explain the compartments of body fluids | [U] | [2] |
| 14 | Explain the functions of plasma proteins | [U] | [2] |
| 15 | Describe the composition and functions of bone | [U] | [3] |

- 16 Explain vertebral column with suitable examples [U] [3]

(4 × 5 = 20)

Part D

Long Essay Questions.

Answer two questions.

Each question carries 10 marks.

- 17 Draw and label a detailed diagram of a nucleus, including its components like the nuclear envelope, nucleoplasm, and nucleolus. [K] [1]
- 18 Illustrate oedema with respect to its types and causes. [U] [2]
- 19 Explain the composition, structure and classification of bone. [K] [3]
- 20 Describe the structure and functions of different types of muscle with the help of a diagram [U] [3]

(2 × 10 = 20)

END OF THE QUESTION PAPER
