



BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – B.Pharm-2018/B.Pharm-2019/B.Pharm-2020/B.Pharm-2022

Course Name – Human Anatomy and Physiology I

Course Code - BP101T

(Semester I)

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Cell is discovered by
- | | |
|-----------------|------------------|
| a) Robert Brown | b) Robert Hooke |
| c) John Mendal | d) Charse Darwin |
- (ii) Name the outer most boundary of nucleus?
- | | |
|---------------------|---------------------|
| a) Plasma membrane | b) Cytoplasm |
| c) Nuclear membrane | d) None of the each |
- (iii) Choose the correct answer: The cells producing the pigment responsible for skin color are
- | | |
|------------------|-----------------|
| a) Keratinocytes | b) Melanocytes |
| c) Adipocytes | d) Merkel cells |
- (iv) Select the correct answer
- | | |
|--|--|
| a) Autophagy is the property of lysosome | b) Autophagy is the property of golgi bodies |
| c) Rough endoplasmic reticulum contain nucleus | d) All of the above |
- (v) Identify the correct answer: Examples of intercellular material surrounding connective tissue cells is
- | | |
|---------------------|-----------|
| a) Ground substance | b) Matrix |
| c) Adipose | d) Bone |
- (vi) Choose correct answer: The longest bone in the human body:
- | | |
|-----------|------------|
| a) Stapes | b) Humerus |
| c) Ulna | d) Femur |
- (vii) The purpose of the rib cage is to:
- | | |
|--------------------------------|--|
| a) Protect the stomach | b) Protect the spinal cord |
| c) Protect the heart and lungs | d) provide an object to which the lungs can attach |
- (viii) The power house of cell is called:
- | | |
|--------------|-----------------|
| a) Cell wall | b) Mitochondria |
| c) Ribosomes | d) Nucleus |

- (ix) The functional unit of life is called
 a) Cell
 b) Egg
 c) Nucleus
 d) None of these
- (x) Choose the correct answer: The cell responsible to the formation of cartilage is the
 a) Fibroblast
 b) Chondroblast
 c) Osteoblast
 d) Megablast
- (xi) Choose the correct answer: The sweat and oil glands are found in
 a) Outer layer of epidermis
 b) Inner layer of epidermis
 c) Both the epidermis & the dermis
 d) Dermis
- (xii) Identify the correct answer: Example of inactive lysosome is
 a) Secondary lysosome
 b) Phagolysosome
 c) Primary lysosome
 d) All of the above
- (xiii) Tissue is a
 a) Group of organs
 b) Group of cells
 c) Group of tissues
 d) Group of organisms
- (xiv) Name the outer most boundary of cell?
 a) Plasma membrane
 b) Cytoplasm
 c) Nuclear membrane
 d) None of the each
- (xv) Choose the correct answer: What is the function of a tendon?
 a) To link bones to bones
 b) To link muscles to bones
 c) To link muscles to ligaments
 d) To bind the cells in compact bone closer together
- (xvi) Choose the correct answer: The cells producing the pigment responsible for skin color are
 a) Keratinocytes
 b) Melanocytes
 c) Adipocytes
 d) Merkel cells
- (xvii) Name an Organelle which serves as a primary packaging area for molecules that will be distributed throughout the cell?
 a) Mitochondria
 b) Plastids
 c) Golgi apparatus
 d) Vacuole
- (xviii) Select the correct answer
 a) Nucleolus contain genetic materials
 b) Translation occur inside nucleus
 c) Cell wall present in human cell
 d) All of the above
- (xix) Choose the correct answer: the function of a tendon is
 a) To link bones to bones
 b) To link muscles to bones
 c) To link muscles to ligaments
 d) To bind the cells in compact bone closer together
- (xx) Select the correct answer: Function of golgi apparatus
 a) Lipid synthesis
 b) Processing carbohydrates
 c) Processing proteins
 d) oxidation

Group-B

(Short Answer Type Questions)

5 x 7=35

2. Briefly describe function of ribosome. (5)

OR

Describe endocytosis process. (5)

3. Describe active diffusion. (5)

OR

Explain briefly the transportation process within cell. (5)

4. Briefly describe the process of formation of secondary lysosome. (5)

OR

Explain the structure and function of cell wall. (5)

5. Explain the structure and function of intermediate filaments. (5)

OR

- Explain the structure of nucleus. (5)
6. Explain the function of mitochondria. (5)

OR

- Illustrate the structure of mitochondria with diagram. (5)
7. Explain neurohumoral transmission with a label diagram. (5)

OR

- Explain the structure and function of GABA receptor. (5)
8. Summarize the functioning of cardiovascular system with a proper diagram of heart. (5)

OR

- Na⁺/K⁺ channel has important role in action potential - justify. (5)

Group-C

(Long Answer Type Questions)

10 x 2=20

9. Explain the process of transportation within cell. (10)

OR

- Explain the process of phagocytosis. (10)
10. Evaluate the action of the "suicidal bag". (10)

OR

- Centrioles formed spindle fibers during cell division. - justify (10)
