



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)
