

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**B. Pharm. Winter 2022 - 23 Examination**

**Semester: I****Subject Code: BP101T****Subject Name: Human Anatomy and Physiology-I****Date: 13/03/2023****Time: 10:00am to 1:00pm****Total Marks: 75****Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)****(20)**

1. In which type of transportation ATP is required?  
a) Passive  
b) Active  
c) Both of the above  
d) None of the above
2. The period between two successive cell divisions is called.....  
a) Duplication  
b) Growth phase  
c) Cell cycle  
d) Interphase
3. The plasma membrane is mainly composed of  
a) Protein  
b) Lipid  
c) Phospholipids  
d) Cellulose
4. Urinary bladder made up of  
a) Stratified columnar epithelium  
b) Transitional epithelium  
c) Simple columnar epithelium  
d) Stratified cuboidal epithelium
5. Connexons is present in which types of cell junction?  
a) tight junction  
b) desmosomes  
c) hemidesmosomes  
d) gap junction
6. The outer most layer of the skin is called as?  
a) cutis  
b) dermis  
c) epidermis  
d) corium
7. Normally human skeleton contains \_\_\_\_\_ axial bones.  
a) 80  
b) 206  
c) 126  
d) 213
8. Oil glands of skin are also known as\_\_\_\_\_  
a) Sweat glands  
b) Lacrimal glands  
c) Sebaceous glands  
d) Doriferous glands
9. Which of the following is not part of axial skeleton?  
a) Sternum  
b) Mandible  
c) Humerus  
d) Sacrum
10. The shoulder joint is a type of:  
a) Hinge joint  
b) Ball and socket joint  
c) Pivot joint  
d) Gliding joint
11. The normal life span of erythrocytes is about\_\_\_\_\_  
a) 35 days  
b) 70 days  
c) 120 days  
d) 90 days
12. The lymphatic tissue is concerned with:  
a) Pancreas  
b) Spleen  
c) Brain  
d) Thyroid
13. Universal receivers can receive blood from  
a) Group AB only  
b) Group O only  
c) Group A, AB  
d) Group O, A, B, AB
14. Factor X of clotting factors is also known as\_\_\_\_\_  
a) Williamson factor  
b) Michel factor  
c) Christmas factor  
d) Stuart factor

15. The t-lymphocytes and b- lymphocytes are the major cells of
  - a) Lymph Nodes
  - b) Lymphatic vessels
  - c) Adrenal glands
  - d) Thymus
16. Olfaction means
  - a) Sense of smell
  - b) Sense of taste
  - c) Sense of vision
  - d) None of the above
17. The Cranial Nerve that connected with ear function is
  - a) Optic
  - b) Vestibulocochlear
  - c) Trigeminal
  - d) Vagus
18. The thickest layer in heart is
  - a) Endocardium
  - b) Myocardium
  - c) Epicardium
  - d) Pericardium
19. Which of the following is not the part of peripheral nervous system?
  - a) Cranial Nerve
  - b) Spinal Nerve
  - c) Spinal Cord
  - d) Ganglia
20. Electrocardiogram gives the information about
  - a) Cardiac output
  - b) State of myocardium
  - c) Cardiac cycle
  - d) None of the above

**Q.2 Long Answers (any 2 out of 3) (10 Mark Each)**

**(20)**

1. Draw the labeled diagram of a cell. Discuss the different transport mechanisms across the cell membrane.
2. Write a note on physiology of Muscle Contraction.
3. Define Haemostasis. Describe in detail mechanism of blood coagulation also mention all clotting factors.

**Q.3 Short Answers (any 7 out of 9) (5 Mark Each)**

**(35)**

1. Define Homeostasis. Explain negative feedback system by giving suitable example.
2. Write structure and function of eye with diagram.
3. Discuss in detail structure and Function of skin.
4. Classify joints and explain synovial joints.
5. Write down composition and function of blood
6. Write the composition, function and circulation of Lymph.
7. Draw a well labelled diagram of heart. Explain various phases of Cardiac cycle.
8. List out various cranial nerve with its origin and function.
9. Define the terms:
  - 1) Stroke volume
  - 2) Atherosclerosis
  - 3) Synapse
  - 4) Action potential
  - 5) Cardiac output