

**I B. Pharmacy I Semester Regular/Supplementary Examinations, February - 2019**  
**HUMAN ANATOMY & PHYSIOLOGY-I**

Time: 3 hours

Max. Marks: 75

- Note: 1. Question Paper consists of three parts (**Part-I, Part-II & Part-III**)  
 2. Answer **ALL** (Multiple Choice) Questions from **Part-I**  
 3. Answer any **TWO** Questions from **Part-II**  
 4. Answer any **SEVEN** Questions from **Part-III**

**PART -I**

1. (i) The principal intracellular cation is (1M)  
 (a)  $\text{Na}^+$  (b)  $\text{Ca}^+$  (c)  $\text{K}^+$  (d)  $\text{Cl}^-$
- (ii) Haematopoiesis means formation of (1M)  
 (a) Erythrocytes (b) Lymphocytes (c) Monocytes (d) All of the above
- (iii) Engulfing of bacteria by white blood cells is called as (1M)  
 (a) Phagocytosis (b) Pinocytosis (c) Exocytosis (d) Endocytosis
- (iv) The tissue that lines and covers the bone is (1M)  
 (a) Epithelial (b) Muscle (c) Nervous (d) Connective
- (v) One of the following is not a part of axial skeletal system (1M)  
 (a) Limbs (b) head (c) Vertebra (d) Heart
- (vi) Set of ions necessary for chemical events of muscle contraction (1M)  
 (a)  $\text{Na}^+$  &  $\text{K}^+$  (b)  $\text{Ca}^+$  &  $\text{Mg}^+$  (c)  $\text{Na}^+$  &  $\text{Ca}^+$  (d)  $\text{Na}^+$  &  $\text{Mg}^+$
- (vii) The joints present in the Knee (1M)  
 (a) Pivot (b) Hinge (c) Saddle (d) Ball and Socket
- (viii) Ligament connecting bone tissue is (1M)  
 (a) Tendon (b) Muscle (c) Synovial Capsule (d) Skin
- (xi) Which of the following is *not* primarily a function of blood plasma (1M)  
 (a) Transport of hormones (b) Transport of  $\text{O}_2$   
 (c) Transport of chylomicrons (d) Transport of antibodies
- (x) Rhesus (Rh) factor is an inherited protein found on the surface of (1M)  
 (a) Red blood cells (b) White blood cells (c) Platelets (d) All the above
- (xi) Vitamin B12 deficiency is called as (1M)  
 (a) Pernicious anemia (b) Sickle cell anemia  
 (c) Aplastic anemia (d) Thelessemia
- (xii) Which one of the following is not a lymphatic tissue (1M)  
 (a) Heart (b) Spleen (c) Thymus (d) Bone marrow
- (xiii) Which of the following is cranial nerve, except (1M)  
 (a) Optic nerve (b) Facial nerve (c) Occipital nerve (d) Vagus nerve
- (xiv) Which of the following nerve transmits sensory information to your brain regarding smells (1M)  
 (a) Oculomotor (b) Olfactory (c) Trigeminal (d) Optic

- (xv) The plexus supplies the arm and upper back (1M)  
(a) Cervical Plexus (b) Lumbar Plexus (c) Sacral plexus (d) Brachial plexus
- (xvi) Which of the following structures is a component of reflex arc? (1M)  
(a) Afferent neuron (b) Efferent neuron (c) Sensory receptor (d) All the above
- (xvii) The white part of the eye that surrounds the cornea (1M)  
(a) Retina (b) Sclera (c) Macula (d) Choroid
- (xviii) The connection of conduction between the myocardium of atria and that of ventricle is (1M)  
(a) S.A node (b) A.V node (c) Bundle of His (d) Purkinje plexus
- (xix) The condition of improper beating of the heart, whether irregular, too fast or too slow is (1M)  
(a) Cardiac arrest (b) Arrhythmia (c) Heart failure (d) Angina
- (xx) Cardiac output is the product of (1M)  
(a) Heart beat, Stroke volume (b) Heart beat, Peripheral resistance  
(c) Stroke volume, Peripheral resistance (d) Peripheral resistance, Contractility

**PART -II**

2. a) Explain the processes of cell division. (5M)  
b) Write a brief note on Reticulo endothelial system. (5M)
3. a) Explain about origin and functions of cranial nerves. (5M)  
b) Write a note on disorders of eye. (5M)
4. a) Write about regulation functions of heart by autonomic nervous system. (5M)  
b) Explain structure of vein with neat labeled diagram. (5M)

**PART -III**

5. Write a brief note on general principles of cell communication. (5M)
6. Write a note on physiology of muscle contraction. (5M)
7. Describe the structure and functions of skin. (5M)
8. Write a note on functions of Lymphatic system. (5M)
9. Explain about composition and functions of blood. (5M)
10. Write a note on disorders of tongue. (5M)
11. Describe the structure of ear. (5M)
12. Write in detail about cardiac cycle. (5M)
13. Explain about disorders of heart. (5M)