

**End Semester/Reappear (Semester I) Examination March 2022**

**Programme: B. Pharm**

**Subject: Human Anatomy and Physiology I**

**Subject Code: BP101T**

**Enrollment No: \_\_\_\_\_**

**Full Marks: 75**

**Time: 3 Hrs**

**Section I**

**1. Objective type questions. Answer all questions.**

**20 x 1 = 20**

i. The sagittal plane divides the human body into:

- (a) left and right portions                      (c) superior and inferior portions  
(b) ventral and dorsal portions                (d) upper and lower portions

ii. The state of dynamic equilibrium between internal physiological environment and changing external environment is called

- (a) Metabolism                      (b) Homeostasis                      (c) Exocytosis                      (d) Digestion

iii. The powerhouse of the cell is

- (a) Lysosome                      (b) Nucleus                      (c) Mitochondria                      (d) Golgi body

iv. The study of tissues is called as

- (a) Cytology                      (b) Physiology                      (c) Pathology                      (d) Histology

v. Blood is a type of which tissue?

- (a) Epithelial tissue                      (b) Muscular tissue                      (c) Cardiac tissue                      (d) Connective tissue

vi. Sebaceous glands or oil glands secrete

- (a) Keratin                      (b) Tears                      (c) Sebum                      (d) Sweat

vii. Which of the following is a movable bone?

- (a) Nasal bone                      (b) Mandible                      (c) Temporal bone                      (d) Maxilla

viii. Smallest bone in the human body is

- (a) Stapes                      (b) Malleus                      (c) Incus                      (d) Hyoid Bone

ix. Ball-and-socket joint in the human body is found in

- (a) Shoulder                      (b) Ankle                      (c) Knee                      (d) Elbow

x. Red Blood Cells are also called as

- (a) Lymphocytes                      (b) Erythrocytes                      (c) Leukocytes                      (d) Platelets

xi. Normal range of Haemoglobin in male is

- (a) 9-11 g/100 ml blood                      (b) 11.5-16.5 g/100 ml blood  
(c) 13.2-16.6 g/100 ml blood                      (d) 10-13 g/100 ml blood

xii. The outer zone of densely packed lymphocytes in a lymph node is called

- (a) Paracortex                      (b) Medulla                      (c) Sinus                      (d) Cortex

xiii. The process of blood cell formation is called

- (a) Erythropoiesis                      (b) Osteogenesis                      (c) Leukopoiesis                      (d) Haemopoiesis

xiv. Afferent nerves carry sensory information from sensory receptors

- (a) To the peripheral nervous system                      (b) From the central nervous system  
(c) To the central nervous system                      (d) From the cortex

- xv. How many pairs of cranial nerves are there in human body?  
 (a) 10 (b) 12 (c) 13 (d) 23
- xvi. The primary pigment Rhodopsin is found in which part of the eye?  
 (a) Rods (b) Cornea (c) Choroid (d) Cones
- xvii. What is the condition called when passengers travelling by any route feel nausea and vomiting?  
 (a) Motion sickness (b) Otitis (c) Labrynthitis (d) Deafness
- xviii. Mitral valve is also known as  
 (a) Tricuspid valve (b) Bicuspid valve (c) Semilunar valve (d) None
- xix. How much time is required for completion of cardiac cycle?  
 (a) 0.1 (b) 0.01 (c) 0.8 (d) 0.08
- xx. Blood pressure in human is measured by the  
 (a) Electro-cardiogram (b) Stethoscope (c) Barometer (d) Sphygmomanometer

**2. Fill in the blanks**

**5 x 1 = 5**

- The major component of the cell membrane is .....
- The liquid portion which forms the major portion of the blood is .....
- There are .....pair of ribs in the human body.
- Reticulo endothelial system (RES) constitute mainly of .....cells
- The healthy range for hemoglobin in women is .....to .....grams per deciliter of blood.

**Section II**

**3. Short Answer type questions. Answer any five.**

**5 x 4 = 20**

- Write about the structure and function of Plasma Membrane.
- Discuss the structure and functions of Skin.
- Enumerate the differences between Cranial nerves and Spinal nerves.
- Write a note on the various types of joint movements.
- With the help of neat and well labeled diagram explain the structure of a Neuron.
- Write a note on Sickle-cell anemia.

**Section III**

**Long Answer type questions. Answer any three.**

**3 x 10 = 30**

- Explain the various blood coagulation factors and discuss the mechanism of blood coagulation.
- Enumerate the various bones of the skull. Give an account of the facial bones.
- Differentiate between the Sympathetic and Parasympathetic nervous system. Give the functions of each system.
- Explain the physiology of Eye.
- Discuss the etiological factors and the pathophysiology of Hypertension.

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