

PARUL UNIVERSITY
FACULTY OF PHARMACY
D. Pharm., April-2019 Examination

Year: 1

Subject Code: 08600105

Subject Name: Human anatomy and physiology

Date: 25/04/2019

Time: 10:00am to 1:00pm

Total Marks: 80

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. The normal life span of erythrocytes is about
(A) 80 days (B) 110 days
(C) 90 days (D) 120 days
2. The system consisting of the heart and blood vessels is called
(A) Endocrine system (B) Lymphatic system
(C) Circulatory system (D) Lymphatic system
3. _____ cavities are spaces within joints
(A) Nasal (B) Synovial
(C) Orbital (D) Oral
4. Histology would be best defined as a study of _____.
(A) Cells (B) Tissues
(C) Cell chemistry (D) The gross structure of body
5. Elimination of metabolic wastes from the body is the function of the
(A) Urinary system (B) Endocrine system
(C) Lymphatic system (D) Nervous system
6. Average body temperature is _____ degrees centigrade
(A) 100 (B) 68
(C) 50 (D) 37
7. _____ Organelle is referred as Power House of cell.
(A) Nucleus (B) Mitochondria
(C) Golgi complex (D) Lysosome
8. The voice box is known as
(A) Alveoli (B) Trachea
(C) Larynx (D) Motormouth
9. The basic functional unit of human kidney is
(A) Henle's loop (B) Cortex
(C) Nephron (D) Pyramid
10. The "Master gland" of endocrine system, located at the base of brain, is
(A) Apical gland (B) Pituitary gland
(C) Pancreas (D) Thyroid gland
11. The structure of the male animal that carries both urine and sperm is called
(A) Ureter (B) Vagina
(C) Urethra (D) Ovary
12. As a general rule, arteries carry
(A) Urine (B) Lymph fluid
(C) Oxygenated blood (D) Deoxygenated blood
13. The structures in the lungs where gas exchange occurs are called
(A) Atria (B) Alveoli
(C) Ventricles (D) Bronchi
14. Process of taking food in is called
(A) Distillation (B) Ingestion
(C) Absorption (D) Defecation

15. Response to light leading to vision is initiated in which of the following cells

(A) Retinal pigment epithelial cells	(B) Rod cells
(C) Both cones and rods	(D) Cone cells
16. Which term means toward or at the back of the body, behind

(A) Anterior	(B) Lateral
(C) Distal	(D) Dorsal
17. The process of blood cell formation is called

(A) Erythropoiesis	(B) Haemopoiesis
(C) Haemolysis	(D) Epiphyses
18. Which muscles that allow you to breath in and out?

(A) Nose	(B) Trachea
(C) Tongue	(D) Diaphragm
19. Which type of gland secretes hormones directly into bloodstream rather than into ducts leading to exterior of the body

(A) Endocrine gland	(B) Sweat gland
(C) Exocrine gland	(D) All of above
20. The chambers of the heart are known as

(A) Ventricles and areas	(B) Ventricles and cavities
(C) Atria and cavities	(D) Atria & ventricls

Q.2 Long Answers (any 8 out of 10) (05 Mark Each)

(40)

1. What is blood coagulation? Describe the mechanism and factors affecting blood coagulation.
2. Write the differences between parasympathetic and sympathetic nervous system
3. Define cell. Enumerate various cell organelles. Describe any two of them in detail.
4. Classify hormones. Add a note on hormone obtained from β -cells of islets of langerhans
5. Write functions of red blood cells and white blood cells
6. Discuss anatomy and physiology of Liver
7. Write a note on cerebrum
8. Draw a labeled diagram of male reproductive system describing any one organ in detail.
9. What is digestion? Discuss the digestion of protein and carbohydrates
10. Explain Physiology of Muscle Contraction

Q.3 Short Answers (2 Mark Each){ Answer any 10}

(20)

1. Draw and label the structure of nephron.
2. Enumerate bones of skull.
3. Define: Blood pressure and Anaemia
4. Name the hormones secreted from anterior and posterior pituitary gland
5. Draw labeled diagram of Skin and enlist functions of it.
6. Discuss salivary glands and its functions
7. Give Physiological actions of Glucocorticoids
8. What is CSF? Write down its compositions
9. What is Metabolism? Write normal BMI for Male and Female
10. Describe the functions of testis
11. List the enzymes that act on carbohydrate, protein & fat
12. Draw labeled diagram of human eye