

B. PHARM.
FIRST SEMESTER
HUMAN ANATOMY & PHYSIOLOGY-I
BP101T
[USE OMR SHEET FOR OBJECTIVE PART]

SET
B

Duration : 3 hrs.

Full Marks : 75

(PART-A : Objective)

Time : 30 min.

Marks : 20

Choose the correct answer from the following:

1×20=20

1. This is another name for the subcutaneous layer
 - a. Dermis
 - b. Epidermis
 - c. Hypodermis
 - d. Basale
2. Thick skin is
 - a. Found in palms, soles of feet and fingertips
 - b. Does not have hair follicle
 - c. Contains more sweat glands than thin skin
 - d. All of the above
3. Which part of AV bundle is responsible for contraction of ventricles
 - a. SA node
 - b. Purkinje fibers
 - c. Bundle of His
 - d. None
4. Which of the following atrium receives oxygenated blood from the lungs through the pulmonary vein?
 - a. Left atrium
 - b. Right atrium
 - c. Right ventricle
 - d. None
5. The structure is a stack of 2-10 disc shaped envelopes bound by a membrane which sorts, packages proteins and membranes
 - a. Nucleolus
 - b. Golgi body
 - c. Ribosome
 - d. None
6. Which of the following organelle is directly involved in formation of proteins in the cell?
 - a. Ribosome
 - b. Lysosome
 - c. Vacuoles
 - d. Centrioles
7. Life span of RBC is
 - a. 90 days
 - b. 50 days
 - c. 120 days
 - d. 20 days
8. Where are erythrocytes formed in adults
 - a. Red bone marrow
 - b. Spleen
 - c. Liver
 - d. All of these
9. What percentage of blood is plasma?
 - a. 90%
 - b. 60%
 - c. 55%
 - d. 20%

10. Which of the following would not cause an increase in erythropoietin?
 - a. Anaemia
 - b. Hemorrhage
 - c. Polycythemia
 - d. None
11. _____ is known as the "pacemaker" of the heart
 - a. SA Node
 - b. AV node
 - c. Purkinje fiber
 - d. Bundle of His
12. Mitral valve is present between
 - a. Right atrium and left ventricle
 - b. Right and left ventricle
 - c. left ventricle and aorta
 - d. left atrium and left ventricle
13. The layer of skin composed of keratinized stratified squamous epithelium is
 - a. Epidermis
 - b. Dermis
 - c. Hypodermis
 - d. None
14. Constant exposure of skin to friction stimulates the formation of a callus which is the thickening of which layer?
 - a. Stratum basale
 - b. Stratum corneum
 - c. Stratum spinosum
 - d. None
15. The characteristic of this stage of mitosis is the separation of the sister chromatids
 - a. Prophase
 - b. Metaphase
 - c. Anaphase
 - d. Telophase
16. The normal diastolic blood pressure in a normal healthy adult human is
 - a. 80 mm Hg
 - b. 60 mm Hg
 - c. 90 mm Hg
 - d. 110 mm Hg
17. Which of the following is a blood disorder where the haemoglobin is defective
 - a. Heterochromia
 - b. Alopecia
 - c. Haemolysis
 - d. Sickle cell anaemia
18. Which of the following is a condition where plaque builds up on the inside of arteries.
 - a. Arthrocentesis
 - b. Atherosclerosis
 - c. Arthritis
 - d. None
19. Which phenomenon is called cell drinking
 - a. Pinocytosis
 - b. Exocytosis
 - c. Phagocytosis
 - d. None
20. Which is not considered a leucocyte?
 - a. Lymphocyte
 - b. Thrombocyte
 - c. Neutrophil
 - d. None

(PART-B : Descriptive)

Time : 2 hrs. 30 min.

Marks : 35

[Answer any seven (7) questions]

1. Elaborate the physiology of muscle contraction 5
2. Write short notes on the following: 2.5+2.5
 - (i) Muscular tissue =5
 - (ii) Appendicular skeleton system
3. Write a note on the cell cycle 5
4. Describe about the various compositions of blood. Briefly discuss about the reticuloendothelial system 2.5+2.5
=5
5. Elucidate the lymphatic system. 5
6. Define Homeostasis. Explain about the positive and negative feedback mechanism. 2.5+2.5
=5
7. Describe in details the anatomy of heart and blood circulation through the heart with proper diagram 5
8. What is cardiac cycle? Discuss briefly about the various events and phases of the cardiac cycle. 1+4=5
9. Define anatomy and physiology. What are the various scopes of anatomy and physiology? 1+4=5

(PART-C : Long type questions)

[Answer any two (2) questions]

1. Explain about the structure and functions of skin. Write about the various conditions associated with the skin. 8+2=10

2. Describe in details about the transport across cell membrane through diagrammatic representation 10

3. What is haemopoiesis? Discuss about the formation of erythrocytes. What is the role of erythropoietin in production of RBC? 1+7+2
=10
