

**GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-I Examination (ER-2020) JANUARY 2024
HUMAN ANATOMY AND PHYSIOLOGY**

Time: 3 Hours

Max marks: 80 M

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.

ii) Draw diagram wherever necessary.

iii) Answer to the point for objective type.

SECTION -A**Long Essay (Answer any six)****6X5=30 M**

1. Classify Joints and explain the synovial joint with diagram.
2. Explain the physiology of the blood.
3. Explain in detail pulmonary and systemic circulation.
4. Describe the histology of small intestine with a diagram and its functions.
5. Define reflex action and explain reflex arc with a diagram.
6. Explain the physiology of the eye.
7. Name the secretions of pituitary gland and their functions.

SECTION -B**Short Essay (Answer any ten)****10X3=30 M**

8. Name different types of epithelial tissue with their location and functions.
9. Describe Erythropoiesis.
10. Draw a neat labeled diagram of internal structure of the heart.
11. Explain the mechanism of external respiration.
12. Write the composition and functions of saliva.
13. Write the difference between sympathetic and parasympathetic nervous system.
14. Describe the physiology of the skin.
15. Describe the role of kidney in maintenance of blood pressure.
16. Explain the endocrine part of pancreas.
17. Explain the process of Spermatogenesis.
18. Write the structure and functions of spleen.

SECTION -C**Objective type (Answer all questions)****20X1= 20M**

19. Define cell.
20. Name two female sex hormones.
21. Classify tissue.
22. Name the circulation that supplies blood to heart muscle.
23. Define internal respiration.
24. Name three pairs of salivary glands.
25. Write any two functions of mitochondria.
26. What is Puberty?
27. List the cartilages present in the larynx.
28. Give any two functions of lymphatic system.
29. Write any two properties of RBC.
30. What is micturition?
31. Pleura is membrane around the _____.
32. Palm is made of 5 metacarples and _____ carples.
33. Tongue is an example of _____ muscle.
34. The artery which leaves the Bowmann's capsule is called _____ artery.
35. Match the following

A**B**

- 1) Ovum
- 2) Frontal Plane
- 3) Cranial nerve
- 4) Adrenal cortex

- a) Vagus
- b) Liver
- c) Divides the body into anterior and 2 posterior
- d) Taste buds.
- e) Oogenesis
- f) Aldosterone
