

D. PHARM PART-I (R/S) EXAMINATION JANUARY 2025 (ER2020)**HUMAN ANATOMY AND PHYSIOLOGY (ER20-14T)****Time: 3 Hours****Total marks: 80**

[NOTE: Indicate the question number correctly for each answer.
Answers to questions 1-20 should be provided in the first pages as a single unit.
Give labelled diagrams/flow chart wherever necessary. Use only blue/black ink.]

Answer all the following.**(1 x 20 = 20)**

1. ----is the bone of pectoral girdle which articulates with humerus.
2. The thoracic cage consists of ---- pairs of ribs.
3. The volume of blood pumped from heart in a minute is known as----
4. ----is the part of respiratory system which extends from larynx to upper ends of lungs.
5. ----is the salivary enzyme that digest carbohydrates.
6. ----is the neurotransmitter released at neuromuscular junction.
7. ----is the kidney hormone that regulates RBC production.
8. ----is the anterior pituitary hormone that regulates thyroid hormone production.
9. Each ovum develops inside a ---- which enlarges gradually and finally ruptures to release the matured egg.
10. ----is the inner most layer of uterine wall.
11. Name the tiny strands of protein that provide structural support and maintain the characteristic shape of the cell.
12. Name the type of cartilage found on the surface parts of bones that form joints.
13. What is the normal platelet count?
14. Name a blood corpuscle having a multi-lobed nucleus.
15. Name the outer most layer of blood vessels.
16. Which wave in ECG represents ventricular repolarisation?
17. Name the reservoir for bile.
18. Name the proteolytic enzyme present in gastric juice.
19. Name the Xth cranial nerve.
20. Name the specialised cochlear hair cells containing auditory receptors that are involved in hearing.

Answer any 10 of the following.**(3 x 10 = 30)**

21. Enumerate the bones of vertebral column.
22. Briefly describe any three types of joints.
23. Write any three types of plasma proteins and mention its function.

24. Briefly explain the functions of spleen.
25. Write the physiology of internal respiration.
26. Write the functions of liver.
27. Write the functions of hypothalamus.
28. Briefly explain the physiology of hearing.
29. Briefly explain the physiology of urine formation.
30. Explain the process of spermatogenesis.
31. Mention the role of calcitonin and parathyroid hormone in regulating blood calcium level.

Answer any 6 of the following.

(5 x 6 = 30)

32. Explain different type of epithelial tissues with suitable examples.
33. Explain the process of blood clotting.
34. Define blood pressure and explain the process of regulation of blood pressure in our body.
35. Write the anatomy of the stomach.
36. Differentiate between sympathetic and parasympathetic nervous system.
37. Explain the anatomy of eye.
38. Explain the structure and functions of cerebellum.
