

Question Bank for Unit IV: Endocrine System Human Anatomy and Physiology-II (Theory, BP201T)

Pharmacy Council of India

Semester II, B. Pharm Program

Introduction

This question bank is designed for Unit IV: Endocrine System of the course Human Anatomy and Physiology-II (Theory, BP201T) as per the PCI Regulation for B. Pharm Semester II. It aligns with the course outcome (CO4): Evaluate the classification, mechanism of action, and disorders of hormones produced by endocrine glands. The questions are categorized into three types: Elaborate (10 marks each), Notes (5 marks each), and Short Answers (2 marks each), reflecting the examination structure of The Tamil Nadu Dr. M.G.R. Medical University (2018–2024). The questions cover all topics in Unit IV, including classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus, and their disorders. They are designed to support the AAA (Align, Assess, Achieve) guidelines, ensuring alignment with learning objectives, varied assessment methods, and achievement of pharmaceutical knowledge relevant to endocrine functions and disorders.

Question Bank

I. Elaborate on (10 Marks Each)

1. a) Draw the structure of adrenal glands. b) Discuss the hormones secreted by adrenal glands and their functions. (Mar 2019)
2. a) Describe anatomy and physiological functions of Thyroid gland. b) Explain the consequence of hypothyroidism and hyperthyroidism. (Mar 2021)
3. a) Draw the neat diagram of endocrine system and explain the anatomy and physiology of pituitary gland. b) Elaborate the hyper and hypo secretion of anterior pituitary gland. (Oct 2022)
4. Summarize the list of endocrine glands and its secretions; explain the anatomy and physiology of pituitary gland. (Dec 2023)

5. Mention the hormones of pituitary gland and write their function. (Oct 2024)
6. Enumerate the structure, secretions, functions and disorders of adrenal gland. (Aug 2023)
7. Explain the classification of hormones and their mechanism of action with examples.
8. Discuss the anatomy, physiology, and disorders of the thyroid and parathyroid glands with a neat labeled diagram.

II. Write Notes on (5 Marks Each)

1. Endocrine function of pancreas. (Sep 2018)
2. Hormones secreted by anterior pituitary gland. (Sep 2018)
3. Discuss the physiology and functions of thyroid glands. (Mar 2019)
4. Explain about the mechanism of hormone action. (Sep 2019)
5. Structure and functions of pituitary gland. (Mar 2020)
6. Describe the endocrine and exocrine pancreas. (Mar 2023)
7. Write a note on anatomy and functions thyroid gland. (Mar 2023)
8. Describe the structure, secretions, functions and disorders of adrenal gland. (Dec 2023)
9. Explain the regulation and functions of hormone secreted by adrenal glands. (May 2024)
10. Summarize the secretions, functions and disorders of pituitary gland. (Aug 2023)
11. Describe the structure and functions of the pineal gland and its role in circadian rhythms.
12. Explain the structure, functions, and disorders of the parathyroid gland.
13. Discuss the role of the thymus in immune function and its hormonal secretions.
14. Explain the endocrine functions of the pancreas and its role in glucose homeostasis.
15. Describe the mechanism of steroid hormone action with examples.

III. Short Answers on (2 Marks Each)

1. Acromegaly. (Sep 2018)
2. Vasopressin. (Sep 2019)
3. Diabetes mellitus. (Mar 2020)
4. Diabetes mellitus. (May 2022)
5. Hashimoto's disease. (Oct 2022)
6. Goiter. (Mar 2023)
7. Role of parathyroid hormones. (Mar 2023)
8. Define hormone and its functions. (Mar 2023)
9. Name the secretion and functions of pineal gland. (Aug 2023)
10. List the name of hormones produced by male, female gonads and its functions. (Aug 2023)
11. List the hormones produced by male and female gonads. (Dec 2023)
12. Name the secretions and functions of parathyroid gland. (Dec 2023)
13. Addison's disease. (May 2024)
14. Diabetes mellitus. (Oct 2024)
15. Myxoedema. (Oct 2024)
16. Pheochromocytoma. (Oct 2024)
17. Classify hormones based on chemical nature.
18. Define the role of melatonin in the body.
19. List two disorders of the pituitary gland.
20. Name the hormones secreted by the adrenal medulla and their functions.
21. Define cretinism and its cause.
22. List two functions of thymosin.
23. Name two disorders of the pancreas.
24. What is hyperparathyroidism?
25. Define the mechanism of peptide hormone action.

Notes

- **Source:** Questions 1–6 (Elaborate), 1–10 (Notes), and 1–16 (Short Answers) are directly extracted or adapted from the provided examination papers (2018–2024). Additional questions (7–8 in Elaborate, 11–15 in Notes, 17–25 in Short Answers) were created to ensure comprehensive coverage of Unit IV topics, such as pineal gland, thymus, hormone classification, and specific disorders, which were underrepresented in the papers.
- **Alignment:** Questions cover all Unit IV topics and align with CO4, emphasizing pharmaceutical knowledge (PO1) and critical thinking (PO2).
- **Assessment:** Questions span knowledge (e.g., define hormone), comprehension (e.g., explain mechanism of action), and application (e.g., discuss thyroid disorders), supporting varied assessment methods.
- **Achieve:** Questions link to pharmacy applications (e.g., insulin therapy for diabetes, corticosteroids for adrenal disorders), enhancing relevance.
- **Exam Structure:** Follows the BP201T exam pattern: Elaborate (2 out of 3, 20 marks), Notes (7 out of 9, 35 marks), Short Answers (all 10, 20 marks).
- **Adaptability:** Questions can be used for in-class quizzes, assignments, or exams, and are adaptable for online platforms (e.g., MCQ platforms like Kahoot).
- **Exclusion:** Questions related to other units (e.g., exocrine pancreas in Unit II, reproductive hormones in Unit V) were excluded to focus strictly on Unit IV (endocrine system).