

## CHAPTER 22: CHEMICAL COORDINATION AND INTEGRATION

### ONE MARK QUESTIONS:

1. Define hormone.(K)
2. Mention the name of the neurosecretory cells ,which secrete the hormone in the hypothalamus.(K)
3. Which of the endocrine gland is regulated by hormones from hypothalamus?(K)
4. What are glucocorticoids?(U)
5. Which hormone inhibits the release of growth hormone from pituitary?(K)
6. Where is hypothalamus located?(K)
7. Why vasopressin is called antidiuretic hormone?(U)
8. Which of the hormone regulates the 24hour diurnal rhythm?(K)
9. What is isthmus?(K)
10. Mention one function of thyrocalcitonin.(U)
11. Mention the location of thymus gland.(K)
12. Name the endocrine gland functional till adolescence and degenerates in adult.(U)
13. Where in the body adrenal glands are located.(K)?
14. Mention the types of cells in the testis which produce testosterone.(K)
15. Name the hormone secreted from the atrial wall of heart.(K)
16. Mention the hormone secreted from corpus luteum.(K)
17. What is the function of secretin?(K)
18. Which hormone stimulates the secretion of bile juice from gall bladder?(U)
19. To which chemical group do testosterone and estrogens belong?(U)
20. Mention the function of erythropoietin.(U)
21. Name the hormone produced by pars intermedia. (k)
22. What causes gigantism?(k)
23. What happens when growth hormone over secreted?(k)
24. What happens when GH is secreted low? (K)
25. Which hormone regulates secretion of androgens?(k)
26. Name the hormone responsible for regulation and pigmentation of skin.(k)
27. Which gland secrete melatonin?(k)
28. What is  $T_3$ ? (k)
29. What is  $T_4$ ? (k)
30. If the menstrual cycle is irregular in a woman, what is the cause.(U)
31. Which hormone helps in bone resorption?(U)
32. Which is the main glucocorticoid in our body? (k)
33. Which is the main mineralocorticoid in our body? (k)

### TWO MARKS QUESTIONS:

1. Mention two types of hormones secreted by hypothalamus regulating the secretion of pituitary based on their mode of action.(U)
2. Distinguish between endocrine and exocrine gland.(U)
3. Enlist the target organ of hormone MSH and ACTH. (A)
4. Write a note on how the function of anterior pituitary is regulated by a hormone.(A)
5. Mention the two regions of pituitary based on the anatomy.(K)
6. Name the two portions of adenohypophysis.(K)
7. Mention the hormones of neurohypophysis.(K)

8. What is the function of neurohypophysis hormones?(U)
9. Mention the two regulations by melatonin.(A)
10. What are the symptoms seen in the growing baby of hypothyroidism pregnant woman?(A)
11. List the functions of thyroid hormone.(U)
12. Parathyroid hormone is called hypercalcemic hormone. Justify.(S)
13. Write a short note on functions of thymosin.(U)
14. Name two types of tissues in adrenal gland.(K)
15. Mention two hormones secreted from adrenal medulla.(U)
16. Write a note on functions of aldosterone.(U)
17. Mention the hormones secreted from :  $\alpha$  cells and  $\beta$  cells of islets of Langerhans(K)
18. Write the difference between insulin and glucagon.(S)
19. Distinguish between hypoglycaemia and hyperglycaemia.(S)
20. What is TCT? What is its function? (U)
21. Why PTH is considered a hypercalcemic hormone? (U)
22. What are catecholamines? (U)
23. Which hormones are secreted during stress? (K)
24. Which is hyperglycaemic hormone?
25. Why glucagon is called hyperglycaemic hormone?
26. What is CCK? What are its functions?
27. It is essential to include Iodine in our diet. Justify.(A)

### THREE MARKS QUESTIONS:

1. Name the disorder caused by the deficiency of the following hormones. (U)  
a. Thyroxine      b. Insulin      c. Growth hormone
2. Explain hormones of fight and flight.(U)
3. Explain the role of thymosins.(S)
4. Enlist three layers of adrenal cortex.(K)
5. Enlist the functions of corticoids. (U)
6. Explain the role of ovarian hormones. (U)
7. Which hormonal deficiency is responsible for the following  
a. Diabetes mellitus      b. Goitre      c. Cretinism
8. Write the effects of hypothyroidism in pregnant woman.

### FIVE MARKS QUESTIONS:

1. Name the endocrine gland in which the following hormones are synthesized. Write one function for each hormone. (A)  
a. Melatonin      b. Glucagon      c. Thyrocalcitonin  
d. Progesterone      e. Cortisol
2. What is adenohypophysis? List any six hormones secreted from it.(K)
3. Adrenalin and Noradrenalin are called as fight flight hormones .Justify.(A)
4. Mention the type of gland and cell type from which insulin is secreted add a note on its action.(A)
5. Explain the mechanism of protein hormone action with a diagrammatic representation.(S)
6. Explain the mechanism of steroid hormone action with a diagrammatic representation.(S)
7. Explain the role of different endocrine cells present in gastrointestinal tract.(S)
8. Define hormone. Explain four types of hormones based on their chemical nature. (U)
9. Explain the role of ANF secreted by atrial wall.(U)

10. Write the hormone secreted by the following(K)  
a. G-I tract      b. Kidney      c. Atrium      d. Pancreas      e. Ovary
11. Write one physiological function of      a. LH      b. GH      c. Oxytocin      d. Vassopressin      e. TSH (K)
12. Write a note on testis as an endocrine gland.(K)
13. Write a note on ovary as an endocrine gland. (K)