

## CHEMICAL COORDINATION AND INTEGRATION

1. Hormones were discovered by  
 (a) W.M. Bayliss      (b) E.H. Starling  
 (c) Both (a) and (b)      (d) None of these
2. Prohormones are  
 (a) active form of hormones  
 (b) Inactive form of hormones  
 (c) Both (a) and (b)  
 (d) none of these
3. Hormones may act slowly or quickly and may be  
 (a) steroids  
 (b) proteins  
 (c) peptides or amino acids derivatives  
 (d) steroids, proteins, peptides or aminoacid derivatives
4. The largest endocrine gland is  
 (a) adrenal gland      (b) pituitary  
 (c) thyroid      (d) pineal
5. The smallest endocrine gland is  
 (a) parathyroid      (b) thyroid  
 (c) pituitary      (d) adrenal
6. The largest endocrine organ is  
 (a) pancreas      (b) testis  
 (c) ovary      (d) gut
7. Overall regulating organ for neuroendocrinal system is  
 (a) pituitary gland  
 (b) pineal gland  
 (c) hypothalamus  
 (d) reticulo-endothelial system
8. Who established that the nervous system controls the functions of endocrine glands?  
 (a) Selye      (b) Huxley
9. Exocrine glands are  
 (a) duct glands      (b) ductless glands  
 (c) hormone secretory      (d) non-secretory
10. The following glands have both endocrine and exocrine functions except  
 (a) thyroid      (b) pancreas  
 (c) testes      (d) ovaries
11. The condition when some hormones work together to control a process in the body is called  
 (a) antagonism  
 (b) factor hypothesis  
 (c) feed back mechanism  
 (d) synergism
12. Most of the hormones are of  
 (a) low molecular weight  
 (b) high molecular weight  
 (c) zero molecular weight  
 (d) variable molecular weights
13. Which is not the ductless gland?  
 (a) Testis      (b) Ovary  
 (c) Sub-maxillary      (d) Pituitary
14. Which of the following does not secrete any hormone?  
 (a) Ovary      (b) Testis  
 (c) Spleen      (d) Pancreas
15. All following endocrine disorders lead to hypokalaemia except  
 (a) cushing disease      (b) aldosteronism  
 (c) thyrotoxicosis      (d) diabetes mellitus
16. Gluconeogenesis is controlled by  
 (a) aldosterone

- (b) parathormone  
(c) cortisol  
(d) all of these
17. Which one is different from the category of other three?  
(a) Gastrin (b) Ptyalin  
(c) Secretin (d) Glucagon
18. Receptors for protein hormones are located  
(a) in cytoplasm  
(b) on cell surface  
(c) in nucleus  
(d) on endoplasmic reticulum
19. "Secondary messenger" is  
(a) cAMP (b) ATP  
(c) ADP (d) DNA
20. Hormones are transport by  
(a) blood (b) lymph  
(c) digestive juices (d) Both (a) and (b)
21. Who proposed the term pheromone?  
(a) Bergstroem  
(b) Karlson  
(c) Starling  
(d) Karlson and Butenandt
22. Term 'Hormone' was coined by  
(a) W.M. Bayliss (b) E.H. Schally  
(c) E.H. Starling (d) G.W. Harris
23. Which of the following acts as precursor for steroid hormones?  
(a) Amino acids (b) Cholesterol  
(c) Mucoprotein (d) Nucleic acids
24. In which of the following organisms hormones are normally absent?  
(a) Monkey (b) Cat  
(c) Cockroach (d) Bacteria
25. Endocrine glands which secrete only hormones are called  
(a) heterocrine (b) holocrine  
(c) merocrine (d) exocrine
26. The effect of different hormones on the body can be best said to bring about  
(a) stimulation of organs  
(b) release of inherent capacities  
(c) proper growth  
(d) coordination of functions
27. In blood the hormones are present as  
(a) dimer (b) monomer  
(c) polymer (d) all of these
28. The true hormones are  
(a) which control growth of certain animals  
(b) which digest proteins  
(c) which directly act on certain glands  
(d) none of the above
29. Mark the incorrect statement  
(a) Hormone produced in adrenal cortex stimulates heart beats  
(b) Hormone produced in thyroid stimulates metabolism  
(c) Hormone produced in duodenum stimulates heart  
(d) Hormone produced in ovary affects uterine contraction
30. Correct hormonal sequence in the increase of menstruation is  
(a) Oestrogen, FSH and progesterone  
(b) Oestrogen, Progesterone and FSH  
(c) FSH, Progesterone and Oestrogen  
(d) FSH, Oestrogen and progesterone
31. Protein hormone is

- (a) testosterone (b) progesterone  
(c) HCG (d) insulin
32. Effect of thyroxine on B.M.R. is  
(a) increase (b) decrease  
(c) uncertain (d) no effect
33. Which disease is due to hyposecretion of an endocrine gland?  
(a) Exophthalmic goiter (b) hypertension  
(c) Gigantism (d) Simple goiter
34. Thyroid gland of vertebrates is considered to be homologous to which of the following part of lower chordates?  
(a) Nerve cord  
(b) Endostyle  
(c) Neural gland  
(d) Pharyngeal gill pouches
35. Parafollicular or 'C' cells are found in the .....of thyroid  
(a) capsule (b) septa  
(c) stroma (d) (a) and (b)
36. Goitre is Prevented by using iodised salt and is associated with  
(a) normal thyroid function  
(b) increased thyroid functions  
(c) decreased thyroid function  
(d) any of above
37. T<sub>4</sub> stands for  
(a) thyroid  
(b) tetrad  
(c) tetraiodothyronine (thyroxine)  
(d) none of the above
38. Who reported animals dying after thyroidectomy (removal of thyroid gland)?  
(a) Berthold (b) Schiff
- (c) Claude Bernard (d) Addison
39. Thyroid follicles are composed of  
(a) squamous epithelium  
(b) columnar epithelium  
(c) pseudostratified epithelium  
(d) cubical epithelium
40. In a patient of hypothyroidism, the level of which of the following is low?  
(a) T<sub>4</sub> (b) TSH  
(c) T<sub>3</sub> (d) All of these
41. Sodium concentration is maximum by  
(a) aldosterone (b) steroids  
(c) testosterone (d) progesterone
42. Thyroxine plays significant effect on  
(a) carbohydrate metabolism  
(b) protein metabolism  
(c) vitamin metabolism and central nervous system  
(d) all of the above
43. In mammals the metabolic rate is controlled by  
(a) pancreas (b) thyroid  
(c) liver (d) pituitary
44. Overactivity of thyroid or an increase in the size of the gland cause  
(a) gigantism (b) cretinism  
(c) exophthalmic goiter (d) myxoedema
45. Who first isolated and studied thyroxine?  
(a) Addison (b) Beaumont, W.  
(c) Kochar (d) Pavlov
46. If thyroid is removed from a tadpole it will  
(a) die immediately  
(b) grow into a giant frog  
(c) turn into a dwarf frog  
(d) remain tadpole throughout life

47. Metamorphosis can be accelerated by  
 (a)  $I_2$  (b) P  
 (c) K (d) Ca
48. The features of cretinism include  
 (a) dry, thick and coarse skin  
 (b) large abdomen  
 (c) respiratory difficulties  
 (d) all of the above
49. Iodine Deficiency Disorder (IDD) is common in  
 (a) deserts (b) jungles  
 (c) cold places (d) hilly areas
50. Which of these is not a steroid hormone produced through iodination of tyrosine?  
 (a) Aldosterone (b) Androgen  
 (c) Oestrogen (d) Thyroxine

#### ANSWERS KEY

1	C	11	D	21	D	31	D	41	A
2	B	12	A	22	C	32	A	42	D
3	D	13	C	23	B	33	D	43	B
4	C	14	C	24	D	34	B	44	C
5	C	15	D	25	B	35	C	45	C
6	D	16	C	26	D	36	D	46	D
7	C	17	B	27	D	37	C	47	A
8	D	18	B	28	D	38	B	48	D
9	A	19	A	29	C	39	D	49	D
10	A	20	D	30	D	40	D	50	D