

ST. JOSEPH'S COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)
CUDDALORE – 607001
PG & RESEARCH DEPARTMENT OF BIOCHEMISTRY

SUBJECT: ADVANCED ENDOCRINOLOGY

SUB CODE: EPBC808S

CLASS: I M.Sc BIOCHEMISTRY

STAFF INCHARGE: Mr. J.JOHN ROBERT & Mrs. S.SEETHA LAKSHMI

SECTION-A

I. ANSWER IN ONE SENTENCE

1. Define hormone.
2. What is paracrine signalling?
3. What is Acromegaly?
4. What is hypothyroidism?
5. Define Pheochromocytoma.
6. What is glucagon?
7. What is feedback control of hormones?
8. Discuss the role of calcitriol.
9. Give an account on MSH
10. Define osteomalacia.
11. What is calmodulin?
12. What is Leptin?
13. What is kinase?
14. What is hypothyroidism?
15. Define Pheochromocytoma.
16. Define Gynecomastia
17. What are secondary messengers?
18. Write any two adenohypophyseal hormones?
19. What is DAG?
20. Define amenorrhea.
21. Define menstrual cycle.
22. Define ligands.
23. What is autocrine signalling?
24. Define thyroxine.
25. Write the major functions of LH
26. What are gonadal hormones?
27. Define receptors.
28. What is secretin?
29. Write any two functions of ADH.
30. What is hCG?
31. What is ANF?
32. What is Conn's syndrome?

33. What is Addison's disease?
34. What is Cushing syndrome?
35. Write the importance of calcitonin
36. Write any two functions of FSH
37. Write any two hypothalamic hormones.
38. Define antithyroid agents.
39. Define endocrine gland
40. Define HRE

SECTION-B

II. ANSWER THE FOLLOWING

41. Explain the physiological effect of Oxytocin.
42. Explain the different types of signalling mechanism seen in signal transduction.
43. What are cell surface receptors? Explain with a suitable example.
44. Explain ion channel linked receptors with suitable example.
45. Explain the physiological effects of PTH.
46. Give an account on antithyroid agents with example.
47. Discuss the biosynthesis of vasopressin
48. Write a note on calcitriol
49. Write a note on menstrual cycle
50. Explain the biosynthesis of androgens
51. Describe the biosynthesis of mineralocorticoids
52. Describe the classification of hormones
53. Explain the steps involved in the synthesis of adrenal cortex.
54. Explain the physiological role of catecholamines.
55. What is hypogonadism? Enumerate the symptoms that occur in men and women.
56. Explain the cell types of islets of Langerhans.
57. Describe the functions of Growth hormone
58. Write a note on prolactin.
59. Write a note on G-protein
60. Discuss the role of calcium as second messenger
61. Write a note on biosynthesis of parathyroid hormone
62. Explain the biosynthesis of androgens
63. Discuss the functions of insulin
64. Give an account on glucagon.
65. Discuss the biosynthesis of vasopressin
66. Write a note on biological functions of cortisol
67. Write note on hypothalamic releasing hormones
68. Give an account on adrenal insufficiency
69. List the symptoms of hypogonadism in both sexes
70. Explain the biological effects of estrogen and progesterone
71. Explain endocrine, autocrine and paracrine signalling.

SECTION – C

III. ANSWER THE FOLLOWING

72. Describe the tropic hormones of hypothalamus and pituitary with its physiological function.
73. What are second messengers? Describe them with suitable example.
74. Describe the biological role of Calcitonin and Calcitriol.
75. Describe the synthesis and biological effects of adrenal medullary hormones.
76. Describe the biosynthesis, regulation, metabolism, functions and transport of estrogen and progesterone.
77. Explain the phases of menstrual cycle. Add a note on Amenorrhoea.
78. Explain in detail the synthesis and biological effects of insulin
79. Describe the mechanism of action of steroid hormones.
80. Discuss the biological effects and disorders of thyroid hormone
81. Explain the biosynthesis and functions of calcitriol
82. Describe the synthesis and biological activities of mineralocorticoids.
83. Discuss the synthesis, biological effects and disorders of estrogen
84. Describe in detail the biosynthesis, regulation, metabolism, functions of anterior pituitary hormones
85. Describe in detail the synthesis and biological effects of adrenal medullary hormones.
86. What are secondary messengers? Describe in detail any three of them
87. Describe in detail the hormones of posterior pituitary hormones with its action, regulation and disorders
88. Explain the biosynthesis, functions and disorders of growth hormones
89. Describe the synthesis and functions of glucocorticoids
90. Explain the biosynthesis and functions of insulin
91. Describe the synthesis and actions of catecholamines