

Endocrine Lecture Test Questions – Set 5

1. All of the following are adrenal hormones, except:
 - a. aldosterone
 - b. cortisol
 - c. glucagon
 - d. epinephrine
 - e. androgens
2. The zona glomerulosa of the adrenal cortex secretes:
 - a. aldosterone
 - b. prolactin
 - c. anti-diuretic hormone
 - d. cortisol
 - e. epinephrine
3. Which of the following is not a function of the glucocorticoids:
 - a. anti-inflammatory actions
 - b. maintenance of normal blood levels of calcium
 - c. mobilization of stored fats
 - d. promotion of gluconeogenesis
 - e. immune suppression
4. Cortisol is from the:
 - a. parathyroid
 - b. adrenal cortex
 - c. adrenal medulla
 - d. anterior pituitary
 - e. posterior pituitary
5. Which of the following is not true with regard to epinephrine and norepinephrine:
 - a. performs functions duplicated by no other system
 - b. mobilizes glucose for respiration
 - c. increases blood pressure
 - d. increases heart rate
 - e. mental stimulation
6. Aldosterone causes the following to increase:
 - a. sodium reabsorption
 - b. water reabsorption
 - c. chloride and bicarbonate reabsorption
 - d. potassium excretion
 - e. all of the above
7. Which of the following is a glucocorticoid:
 - a. norepinephrine
 - b. deoxycorticosterone
 - c. progesterone
 - d. cortisol
 - e. aldosterone

8. Cushing's syndrome (hyperadrenalism) would cause:
 - a. muscle wasting
 - b. hyperglycemia
 - c. hypertension
 - d. immune suppression
 - e. all of the above effects

9. The overall effect of epinephrine:
 - a. parallel action with other androgens (e.g. testosterone)
 - b. stress responses
 - c. lowering of blood glucose
 - d. reabsorption of sodium by the kidneys
 - e. promotion of mammary gland growth and milk secretion

10. Which of the following secretes estrogens:
 - a. adrenal cortex
 - b. adrenal medulla
 - c. adenohypophysis
 - d. parathyroid
 - e. hypothalamus

11. Which of the following makes glucose more readily available, but does not stimulate its uptake and use by cells:
 - a. insulin
 - b. T₃ and T₄
 - c. cortisol
 - d. glucose inhibitory hormone
 - e. oxytocin

12. The principal function of aldosterone:
 - a. increased sodium reabsorption, to induce water reabsorption
 - b. increased potassium reabsorption
 - c. anti-inflammatory
 - d. stimulates stress responses
 - e. all of the above

13. Addison's disease (hypoadrenalism) would cause:
 - a. muscle wasting
 - b. hypertension
 - c. hypoglycemia
 - d. immune and inflammatory suppression
 - e. abnormal fat distribution

14. Immune suppression is a function of:
 - a. aldosterone
 - b. FSH
 - c. oxytocin
 - d. cortisol
 - e. GH

15. The adrenal medulla and the autonomic nervous system are both involved in:
 - a. immune suppression
 - b. stress responses
 - c. skeletal development
 - d. erythropoietic control
 - e. blood calcium homeostasis

16. Abnormal fat distribution, muscle atrophy, hyperglycemia, hypertension and immune suppression, would indicate:
 - a. myxedema
 - b. diabetes mellitus
 - c. hypoadrenalism (Addison's disease)
 - d. hyperadrenalism (Cushing's syndrome)
 - e. hyperthyroidism (Graves disease)

17. Which of the following secretes estrogens and progesterone:
 - a. anterior pituitary
 - b. posterior pituitary
 - c. zona reticularis of adrenal cortex
 - d. hypothalamus
 - e. thyroid follicles

18. What is the most important control mechanism for aldosterone secretion:
 - a. ACTH secretion
 - b. renin-angiotensin system
 - c. blood sodium level
 - d. blood potassium level
 - e. blood glucose level

19. The zona reticularis of the adrenal cortex secretes:
 - a. sex hormones
 - b. mineralocorticoids
 - c. glucocorticoids
 - d. epinephrine and norepinephrine
 - e. ACTH

20. Beta cells of the islets of Langerhans secrete:
 - a. thyroxine
 - b. hydrocortisone
 - c. norepinephrine
 - d. insulin
 - e. glucagon

21. All of the following produce effects which oppose insulin action, except:
 - a. glucagon
 - b. glucocorticoids
 - c. growth hormone
 - d. thyroxine
 - e. epinephrine

22. Insulin shock (from the effects of excess insulin) is caused by the brain's response to:
- glucose deprivation
 - hyperglycemia
 - elevated blood pressure
 - lowered calcium in the blood
 - acidosis from excess fatty acid metabolism
23. Which hormone would decrease fat respiration and availability:
- GH
 - thyroxine
 - epinephrine
 - glucagon
 - insulin
24. Which of the following is an insulin antagonist:
- GH
 - cortisol
 - epinephrine
 - glucagon
 - all of the above
25. Which of the following would not be an effect of diabetes mellitus:
- increased gluconeogenesis
 - abnormal fat metabolism
 - atherosclerosis
 - protein loss
 - hyperglycemia
26. How does insulin lower blood glucose:
- increased transport into cells
 - increased respiration
 - increased glucogenesis
 - decreased gluconeogenesis
 - all of the above
27. The source of insulin is:
- zona fasciculata of adrenal cortex
 - basophils of pars distalis
 - beta cells of islets of Langerhans
 - alpha cells of islets of Langerhans
 - chromophobes of pars distalis
28. All of the following function in endocrine production to some extent, except:
- kidneys
 - pancreas
 - gallbladder
 - testes
 - hypothalamus

29. Which of the following directly controls metabolic functions of all tissues located throughout the body:
- T₄
 - thyrotropin release-stimulating hormone
 - melanocyte stimulating hormone
 - ACTH
 - FSH
30. From what you know about the functions and interrelations of all body systems--which of the following hormones, if absent, would be most rapidly fatal:
- growth
 - aldosterone
 - anti-diuretic
 - insulin
 - cortisol
31. Which of the following hormones, if suddenly secreted in extremely increased amounts, would be most rapidly fatal (or debilitating):
- insulin
 - follicle-stimulating
 - growth (somatotropic)
 - epinephrine
 - parathyroid
32. Which of the following hormones, if suddenly secreted in extremely lowered amounts, would be most rapidly fatal (or debilitating):
- cortisol
 - aldosterone
 - MSH
 - parathyroid
 - growth
33. Which of the following hormones, if in great excess, would probably be the most rapidly fatal:
- aldosterone
 - thyroxine
 - insulin
 - testosterone
 - cortisol
34. Which of the following hormones is not a protein nor a peptide:
- ACTH
 - prolactin
 - growth
 - FSH
 - corticotropin release-stimulating hormone
35. The control of blood glucose is maintained by coordinated activity of all of the following endocrine glands, except:
- neurohypophysis

- b. islet cells of the pancreas
 - c. the adrenal cortex
 - d. adenohypophysis
 - e. thyroid
36. Growth and development is influenced (directly or indirectly) by:
- a. growth hormone
 - b. thyroid T₃ and T₄
 - c. thyroid stimulating hormone
 - d. growth release-stimulating hormone
 - e. all of the above to some extent
37. Which of the following controls some metabolic functions in all cells of the body:
- a. insulin
 - b. GH
 - c. thyroxine
 - d. cortisol
 - e. all of the above
38. Which of the following hormones is not protein-related (to any extent):
- a. GH
 - b. FSH
 - c. aldosterone
 - d. T₄
 - e. CRH
39. The brain controls its glucose utilization directly, via:
- a. insulin stimulation
 - b. parasympathetic stimulation
 - c. sympathetic stimulation
 - d. thyroid stimulation
 - e. neurohypophysis inhibition
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40. Shock and coma can result from either hypoglycemia or hyperglycemia.
41. The thymus hormones are responsible, indirectly, for antibody production.
42. Hormones from the thymus are responsible for proper development of the adrenal glands.
43. Aldosterone is important for its anti-inflammatory effects.
44. Hyperadrenalism (Cushing's Syndrome) would produce muscle wasting, hyperglycemia, hypertension and immune suppression.
45. All adrenal cortical hormones are glycoproteins.
46. Of the adrenal hormones, the absence of aldosterone would be the most predictably fatal.
47. Hypersecretion of adrenal androgens would produce excessive masculinization in a mature male.

48. Severe immune suppression would be a consequence of hypoadrenalism.
49. Hypersecretion of adrenal androgens would produce sexual precocity in an immature male.
50. Aldosterone is a mineralocorticoid.
51. Aldosterone is a glucocorticoid.
52. Hypersecretion of adrenal androgens would produce sexual precocity in an immature female.
53. Shock from the effects of excess insulin is caused by the brain's response to acidosis.
54. The adrenal medulla and the autonomic nervous system are both involved in stress responses.
55. Glucagon is secreted by the adrenal cortex.
56. Thyroxine is an insulin antagonist.