Endocrine Syst. H.W

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1.	Which of the following controls the pituitary gland?				
	a. b.	Hypothalamus Thyroid gland	c. d.	Adrenal gland Hippocampus	
2.	What kind of hormones bind to receptors in the cytoplasm of cells?				
	a. b.	Amino acid hormones Steroid hormones	c. d.	Both A and B Neither A nor B	
3.	Which of the following hormones does the adrenal gland produce?				
	a. b.	Aldosterone Adrenaline	c. d.	Glucocorticoids All of the above	
4.	The hormone that stimulates the release of calcium from bone tissue is called —				
	a. b.	thyroid hormone. calcitonin.	c. d.	parathyroid hormone. human growth hormone.	
5.	The hormone stimulates the liver to release glucose into the blood when glucose levels are low.				
	a. b.	glucagon insulin	c. d.	bile Gastrin	
6.	The ho	The hormone that causes a decrease in blood glucose is			
	a. b.	glucagon insulin	c. d.	gastrin Nuclease	
7.	The liver reacts to a high level of glucose in the blood by converting some of the glucose to				
	a. b.	insulin glucagon	c. d.	galactose Glycogen	
8.	What controls the release of food from the stomach to the small intestine?				
	a. h	villus	c.	epiglottis muscular valve	

- 9. The body's preferred energy source is _____.
 - a.carbohydratesc.proteinsb.fatsd.minerals
- **10.** After having a double-bacon cheeseburger with a milkshake, which of the following hormones would be expected to increase?
 - A. Prolactin
 - B. Glucagon
 - C. Insulin
 - D. Parathyroid Hormone

11. After having a double-bacon cheeseburger with a milkshake, which of the following hormones would NOT be expected to increase?

- A. Secretin
- B. Insulin
- C. Cholecystokinin
- D. Glucagon

12. Which of the following accurately describes thyroid hormone?

- A. Released from the anterior pituitary
- B. Binds to receptors on the outside of the cell
- C. Derived from cholesterol
- D. Binds to receptors on the inside of the cell

13. Which of the following is a physiological function that is mediated by a hormone released by the posterior pituitary?

- A. Maturation of the egg and sperm
- B. Decrease in calcium levels
- C. Water retention
- D. Increase in thyroid hormone level

14. Hormones travel through the blood stream and bind to receptors located on target cells. Which of the following would NOT bind to transmembrane proteins on the target cells?

- A. Estrogen
- B. Prolactin
- C. Insulin
- D. Antidiuretic Hormone

- **15.** Growth factors and histamine are chemical agents released in small amounts that act locally on neighboring cells. Which of the following best describes the function of growth factors and histamine?
 - A. Endocrine function
 - B. Autocrine function
 - C. Paracrine function
 - D. None of the above

16. Which of the following is both an endocrine and exocrine gland?

- A. Thyroid Gland
- B. Adrenal Glands
- C. Parathyroid Glands
- D. Liver

17. The primary role of the parathyroid gland is:

- A. To maintain metabolic homeostasis
- B. To regulate serum calcium levels
- C. To send hormonal signals to other endocrine organs
- D. To receive hormonal signals from the hypothalamus

18. Hormones secreted by the hypothalamus would be classified as:

- A. Intracrine
- B. Autocrine
- C. Paracrine
- D. Endocrine

19. All of the following are true of posterior pituitary hormones EXCEPT:

- A. They include direct and tropic hormones
- B. They are released from the posterior pituitary
- C. A nerve signal from the hypothalamus stimulates their release
- D. They include antidiuretic hormone and oxytocin

20. The concentration of hormones in the bloodstream is regulated by:

- A. Production of receptor antagonists
- B. Indirect growth-promoting effects
- C. Nutritional signals to the endocrine gland
- D. Positive and negative feedback loops

21. The role of adenylate cyclase is:

- A. To degrade steroid hormones, terminating their function
- B. To activate G protein-coupled receptors via phosphorylation
- C. To aid in signal amplification via conversion of GTP to GDP
- D. To cyclize ATP in order to generate second messengers

22. Biosynthesis of steroids begins with:

- A. Methylation of a sesquiterpene
- B. Binding of pyrophosphate to a terpene
- C. Generation of a sterol
- D. Binding of two terpene groups

23. Steroid hormones include which of the following:

- A. Thyroid hormones and adrenal cortical hormones
- B. Pancreatic and thyroid hormones
- C. Sex hormones and adrenal medullary hormones
- D. Sex hormones and adrenal cortical hormones

24. Which gland is responsible for the flight-or-fight response?

- A. adrenal gland
- B. parathyroid gland
- C. pituitary gland

25. Which gland is responsible for calcium regulation?

- A. pancreas
- B. parathyroid gland
- C. pineal gland

26. Hormones can be made of each of the following EXCEPT:

- A. carbohydrates
- B. lipids
- C. proteins

27. How do hormones differ from the nervous system?

- A. Hormones are faster.
- B. Hormones are only secreted by one specific type of cell.
- C. Hormones travel farther.

28. How many hormones are secreted by the anterior lobe of the pituitary gland?

A. 3
B. 5
C. 7

29. A deficiency in what hormone leads to dwarfism?

- A. lactogenic hormone
- B. luteinizing hormone
- C. somatotropin hormone

30. What two hormones are produced by the pancreas?

- A. epinephrine and norepinephrine
- B. insulin and glucagon
- C. parathormone and vasopressin

31. Which of the following statements regarding pituitary hormones is false?

- A) The hypothalamus makes oxytocin and antidiuretic hormone, which are transported the posterior pituitary for storage.
- B) Antidiuretic hormone, released by the posterior pituitary, causes urine volume to increase and blood volume to decrease.
- C) Luteinizing hormone, an anterior pituitary hormone, triggers ovulation of an egg from the ovary and causes the ruptured follicle to produce progesterone and some estrogens.
- D) Hyposecretion of follicle-stimulating hormone or luteinizing hormone leads to sterility in both males and females.
- E) (B) and (C)

32. Androgens are produced by the

- A) ovaries.
- B) testes.
- C) hypothalamus.
- D) islets of Langerhans.

33. Calcium level in the blood is regulated by the:

- A) Parathyroid and thyroid
- B) Adrenal medulla and pancreas
- C) Testes
- D) Parathyroid and thymus

- **34.** Which one of the following is NOT typical of the changes that follow the binding of a hormone to its target cells:
- A) plasma membrane permeability changes
- B) cellular mutations occur
- C) enzymes are activated or inactivated
- D) mitosis is stimulated

35. Estrogens and progesterone are produced by:

- A) the testes.
- B) the ovaries.
- C) the adrenal glands.
- D) the hypothalamus.
- **36.** Failure of the pituitary to stop producing growth hormone after body growth is completed results in .
- A) Gigantism
- B) Tetany
- C) Kidney failure
- D) Acromegaly
- **37.** Most endocrine organs are prodded into action by other hormones; this type of stimulus is called:
- A) hormonal stimulus
- B) humoral stimulus
- C) neural stimulus
- D) receptor-mediated stimulus

38. Tropic hormones:

- A) stimulate the pineal gland to secrete hormones
- B) stimulate the thymus gland to secrete hormones
- C) stimulate other endocrines glands to secrete hormones
- D) stimulate nervous tissue

39. Most of the endocrine system is regulated by:

- A) negative feedback mechanisms.
- B) positive feedback mechanisms.
- C) hormone-receptor complexes.
- D) hormone-gene complexes.

40. Nervousness, increased body temperature, and increased blood-pressure are indications of

- A) diabetes mellitus
- B) hypoglycemia
- C) hypothyroidism
- D) hyperthyroidism

41. The alpha cells of the pancreas secrete which targets the

- A) glucagon; liver
- B) melatonin; liver
- C) glucagon; kidney
- D) calcitonin; thyroid

42. The growth hormone produced by the pituitary gland is known as

- A) somatotropin
- B) prolactin
- C) luteinizing hormone
- D) follicle-stimulating hormone

43. The relatively constant internal environment of the body is maintained by....

- A) negative feedback.
- B) positive feedback.
- C) homeostasis.
- D) metabolism.

44. The secretions from which of these glands differs between males and females?

- A) Adrenal.
- B) Parathyroid.
- C) Gonadal.
- D) Pancreas.

45. Why can a single endocrine hormone produce a wider spread of responses in more of the body than a single nerve cell?

- A) A single hormone can target many different responses, whereas a nerve only targets a single response.
- B) Blood can carry all the same hormones throughout the body simultaneously, producing responses all over the body; nerve cells can only target a small number of cells.
- C) Nerve cells and blood work together. The endocrine has nothing to do with the nervous system.
- D) Endocrine hormones only target a very small number of precise responses.

46. Which of the following has both endocrine and exocrine functions?

- A) anterior pituitary
- B) thyroid
- C) adrenal medulla
- D) pancreas

47. Which of the following produce antagonistic results?

- A) calcitonin and parathryroid hormone
- B) FSH and LH
- C) ADH and vasopressin
- D) oxytocin and prolactin

48. How is hormone secretion regulated?

- A) by the nervous system
- B) by other hormones
- C) by changes in blood composition
- D) all of the above

49. Target cells for hypothalamic releasing hormones are in the..

- A) thyroid
- B) hypothalamus
- C) anterior pituitary
- D) posterior pituitary

50. The posterior pituitary gland stores and secretes..

- A) oxytocin and antidiuretic hormone
- B) human growth hormone and thyroid stimulating hormone
- C) prolactin and follicle stimulating hormone
- D) glucocorticoids and androgens

51. What stimulates the release of PTH from the parathyroid gland?

- A) TSH from the posterior pituitary gland
- B) high levels of calcium in the blood
- C) calcitonin from the anterior pituitary gland
- D) low levels of calcium in the blood

Match:



- 52. Thyroid gland.53. Pineal gland.54. Thymus gland.55. Pitutary gland.
- 56. Pancreas.
- 57. Ovary.58. Adrenal gland.
- 59. Testes.
