

1-Why are parafollicular (C) cells of the thyroid not controlled by anterior pituitary hormones?



- A) They are not endocrine cells
- B) They secrete insulin
- C) They need to rapidly respond to changes in blood calcium
- D) They depend on hypothalamic dopamine

B

2-Removal of which of the following glands would most likely lead to immediate life-threatening complications due to loss of calcium homeostasis?

- A) Pineal gland
- B) Adrenal medulla
- C) Parathyroid glands
- D) Thyroid follicular cells

C

3-Which of the following correctly identifies the group of glands considered essential to sustain life?

- A) Posterior pituitary, pineal, pancreas
- B) Adrenal medulla, thyroid, pancreas
- C) Anterior pituitary, adrenal cortex, parathyroid
- D) Thyroid, thymus, adrenal medulla

C

4-20-year-old male is found to have elevated levels of somatostatin due to a rare neuroendocrine tumor. Which of the following is the most likely consequence of this hormonal abnormality?

- A) Increased insulin and glucagon secretion
- B) Enhanced gastric acid secretion
- C) Increased intestinal motility and pancreatic enzyme release
- D) Decreased growth hormone and insulin secretion

D

5-A lesion disrupts the connection between the hypothalamus and the anterior pituitary. Which of the following hormone levels is most likely to increase as a result?

- A) Growth hormone
- B) ACTH
- C) TSH
- D) Prolactin

D

6-Which of the following hormones work together to promote full breast development and preparation for lactation during

pregnancy?



- A) Estrogen, progesterone, and prolactin
- B) FSH, LH, and oxytocin
- C) Cortisol, oxytocin, and dopamine
- D) Estrogen, testosterone, and insulin

A

7-Which hypothalamic nucleus is primarily responsible for synthesizing antidiuretic hormone (ADH)?

- A) Arcuate nucleus
- B) Paraventricular nucleus
- C) Ventromedial nucleus
- D) Supraoptic nucleus

D

8-Which hypothalamic nucleus is primarily responsible for synthesizing oxytocin?

- A) Supraoptic nucleus
- B) Arcuate nucleus
- C) Paraventricular nucleus
- D) Lateral hypothalamic area

C

9-Which part of the nephron is the primary site where ADH acts, and thus most affected when ADH is inhibited?

- A) Proximal convoluted tubule
- B) Thick ascending limb of Henle's loop
- C) Distal convoluted tubule
- D) Collecting duct

D

10-Immediately after delivery, newborns are often placed on the mother's breast. What is the primary physiological reason for this practice?

- A) To stimulate prolactin for milk production
- B) To increase dopamine and prevent postpartum depression
- C) To stimulate oxytocin release, aiding milk ejection and uterine contraction
- D) To trigger estrogen release for uterine healing

C