

1. **Answer:** D

Explanation: The pineal gland secretes melatonin, the hormone that regulates the biological rhythm.

2. **Answer:** E

Explanation: The ovaries secrete progesterone, the hormone that promotes uterine lining growth.

3. **Answer:** C

Explanation: The thyroid gland secretes calcitonin, the hormone that lowers blood calcium levels.

4. **Answer:** A

Explanation: The pancreas secretes glucagon, the hormone that raises the blood sugar level.

5. **Answer:** B

Explanation: The posterior pituitary gland secretes oxytocin, the hormone that stimulates contraction of the uterus and mammary gland cells.

6. Answer: D

Explanation: The thyroid hormone is actually a pair of hormones: **thyroxine (T₄)** and **triiodothyronine (T₃)** with the number designation referring to the number of iodine atoms the hormones contain.

7. Answer: C

Explanation: The second set of neurosecretory cells in the hypothalamus secrete two other kinds of hormones into blood vessels that connect to the anterior pituitary: the **releasing hormone (RH)** and an **inhibiting hormone**. The former stimulates the anterior to secrete one or more specific hormones and the latter acts to stop the anterior pituitary in secreting hormones.

8. Answer: D

Explanation: Unlike the other hormones, **prolactin (PRL)** does not lead to the secretion of other hormones, and in mammals, this hormone stimulates the production of milk.

9. Answer: C

Explanation: The pancreas secretes hormones that regulate blood glucose levels. Beta cells in the pancreas release the hormone insulin. When blood glucose levels elevate and stimulate the pancreas, the effect of **insulin** is the uptake of glucose from the blood leading to a decrease in blood glucose levels. **Glucagon** opposes the effect of **insulin** and is released by alpha cells in the pancreas. **Glucagon** causes glycogen to break down into glucose to be released into the blood.

10. Answer: D

Explanation: Insufficient iodine in the diet can cause **goiter**, an enlargement of the thyroid glands.