

1. What is the embryological origin of the neurohypophysis?

- A. Oral ectoderm
- B. Mesoderm
- C. Neural ectoderm
- D. Endoderm
- E. Surface ectoderm

2. Which part of the adenohypophysis surrounds the neural stalk?

- A. Pars distalis
- B. Pars intermedia
- C. Pars nervosa
- D. Pars tuberalis
- E. Infundibulum

3. Which type of adenohypophysis cell has no staining affinity?

- A. Acidophils
- B. Basophils
- C. Chromophils
- D. Chromophobes
- E. Mammotrophs

4. Which hormone is secreted by somatotrophs?

- A. Prolactin
- B. ACTH
- C. Growth hormone
- D. FSH
- E. Oxytocin

5. Which acidophilic cell type increases granule size during pregnancy?

- A. Somatotrophs

- B. Thyrotrophs
- C. Mammotrophs
- D. Gonadotrophs
- E. Corticotrophs

6. Which hormone stimulates the adrenal cortex?

- A. Oxytocin
- B. ACTH
- C. TSH
- D. FSH
- E. ADH

7. Where are Herring bodies located?

- A. Adenohypophysis
- B. Pineal gland
- C. Pars nervosa
- D. Zona reticularis
- E. Islets of Langerhans

8. What is the main function of parafollicular cells in the thyroid gland?

- A. Secrete T3 and T4
- B. Secrete calcitonin
- C. Absorb iodine
- D. Regulate blood sugar
- E. Produce melatonin

9. Which cells in the adrenal cortex are known as spongiocytes?

- A. Zona glomerulosa
- B. Zona reticularis
- C. Chromaffin cells

D. Zona fasciculata

E. Medullary cells

10. Which of the following is NOT a feature of zona glomerulosa cells?

A. Secrete aldosterone

B. Contain lipid droplets

C. Stimulated by ACTH

D. Secrete cortisol

E. Located beneath capsule

11. What is the main hormone secreted by chromaffin cells that stain lighter and have smaller granules?

A. Norepinephrine

B. Cortisol

C. Epinephrine

D. Aldosterone

E. Somatostatin

12. The main structural unit of the thyroid gland is the:

A. Follicle

B. Lobule

C. Capsule

D. Septum

E. Colloid

13. Inactive follicular cells in the thyroid gland appear as:

A. Columnar

B. Squamous

C. Cuboidal

D. Stratified

E. Pseudostratified

14. What is the main function of follicular cells in the thyroid gland?

- A. Secrete calcitonin
- B. Produce glucagon
- C. Secrete thyroid hormones
- D. Absorb glucose
- E. Produce insulin

15. Which pancreatic islet cell secretes insulin?

- A. Alpha
- B. Delta
- C. Beta
- D. PP
- E. Gamma

16. Which part of the pituitary gland does NOT contain secretory cells?

- A. Pars distalis
- B. Pars intermedia
- C. Pars tuberalis
- D. Pars nervosa
- E. Infundibulum

17. What hormone is secreted by thyrotrophs?

- A. T3
- B. T4
- C. TSH
- D. TRH
- E. ACTH

18. Which of the following best describes pituicytes?

- A. Endocrine cells
- B. Modified neurons
- C. Supportive glial-like cells
- D. Stem cells
- E. Plasma cells

19. Which endocrine gland is characterized by brain sand (corpora arenacea)?

- A. Pituitary
- B. Adrenal
- C. Pineal
- D. Thyroid
- E. Pancreas

20. Which zone of adrenal cortex is the thickest?

- A. Glomerulosa
- B. Reticularis
- C. Fasciculata
- D. Medulla
- E. Capsule

21. Which hormone is secreted by the neurohypophysis?

- A. Oxytocin
- B. ACTH
- C. TSH
- D. FSH
- E. GH

22. The pinealocyte secretes which hormone?

- A. Prolactin
- B. Melatonin

C. Cortisol

D. Thyroxine

E. Insulin

23. Which pancreatic islet cell type is most abundant?

A. Alpha

B. Delta

C. Beta

D. PP

E. Gamma

24. What is the PAS staining reaction for colloid in thyroid follicles?

A. Negative

B. Positive

C. Variable

D. Depends on the dye

E. Cannot be determined

25. Where are parafollicular cells located?

A. Inside the follicular lumen

B. Outside thyroid follicles

C. Within follicular epithelium, but not touching lumen

D. In blood vessels

E. In the stroma

26. Which cell secretes glucagon?

A. Beta

B. Alpha

C. Delta

D. PP

E. C cell

27. What distinguishes norepinephrine granules in chromaffin cells under EM?

A. Less electron density

B. Regular shape

C. More electron density

D. No mitochondria

E. Clear vesicles

28. Which pituitary cell type secretes FSH and LH?

A. Corticotrophs

B. Thyrotrophs

C. Gonadotrophs

D. Somatotrophs

E. Mammatrophs

29. Which hormone increases during lactation?

A. Oxytocin

B. TSH

C. Prolactin

D. ACTH

E. ADH

30. The adrenal medulla develops embryologically from:

A. Ectoderm

B. Mesoderm

C. Neural crest

D. Endoderm

E. Oral ectoderm

Answers

1. C

2. D

3. D

4. C

5. C

6. B

7. C

8. B

9. D

10. D

11. C

12. A

13. B

14. C

15. C

16. D

17. C

18. C

19. C

20. C

21. A

22. B

23. C

24. B

25. C

26. B

27. C

28. C

29. C

30. C