

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
(وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ)



Endocrine System | MID

023 Mid Past Papers



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Special Thank To : DST

1. Comparing chief cells and oxyphil cells of PTH gland, oxyphil cells are :

- A. more acidophilic than chief cells*
- B. Smaller than chief cells*
- C. More abundant than chief cells*
- D. Secrete more PTH hormone than chief cells*
- E. More common in younger age*

Answer:A

2. One of the following is located in follicular cells basally:

A. Golgi apparatus

B. Junctional complexes

C. Rough endoplasmic reticulum

D. Secretory granules

3-Which ONE of the following statements about the pineal gland is CORRECT?

A. It is located between the inferior colliculi and receives its blood supply mainly from the anterior cerebral artery.

B. It is located above the optic chiasm, receives blood from the superior hypophyseal arteries, and secretes ADH.

C. It is located between the superior colliculi and receives its blood supply from branches of the posterior cerebral artery.

D. It is located within the sella turcica, receives blood from the internal carotid artery, and is connected to the hypothalamus by the infundibulum.

4. Regarding relations of pituitary gland, one of the following is wrongly matched:

A. Anterior: sphenoid sinus

B. Inferior: basilar artery

C. Lateral: internal carotid artery

D. Posterior: dorsum sellae

5. Regarding pituitary gland embryology, the Posterior wall of Rathke's pouch will give rise to:

- A. Pars intermedia*
- B. Pars nervosa*
- C. Infundibular stalk*
- D. Pars distalis*
- E. Pars tuberalis*

6. Regarding embryology of parathyroid glands, choose the correct statement:

A. Both derived from the third pouch

B. Both derived from the fourth pouch

C. Superior parathyroid derived from the fourth pouch and the inferior from the third pouch

D. Superior parathyroid derived from the third pouch and the inferior from the fourth pouch

7. Choose the correct statement about the embryology of the adrenal gland(cortex & medulla):

A. Both derived from neural crest

B. Cortex derived from intermediate mesoderm and medulla from neural crest.

C. Medulla derived from neural crest ectoderm and cortex from surface ectoderm

Answer:B

8. True about adrenal (suprarenal) glands, with relation to it's surgical removal:

Ans: Right adrenal gland has close relation with IVC and directly drains into it which increases risk of bleeding during it's removal

9. Wrong about somatotrophes in ant pit:

A. Stain red with acidic dyes

B. Secret somatotropin

C. Classified as chromophiles

D. Make about 50% of the ant pit

E. excess in it's hormone before puberty causes acromegaly

10. During childbirth, which hormone should be used to increase uterine contractions?

Answer: Oxytocin

11. Which hormones set the basal metabolic rate and stimulate maturation of the brain?

Answer: Thyroid hormones (T3&T4)

12. This hormone is growth hormone like hormone,caloregenic and stimulate CNS development during fetal life?

Answer:Thyroid hormone

13. Which pancreatic cell secrete hormone thats identical to growth hormone inhibiting hormone:

- A. Alpha cells*
- B. Beta cells*
- C. Gama cells*
- D. Delta cells*
- E. F cells*

14. Wrong about endocrine biochemistry:

- A. All membrane receptors have signal amplification*
- B. All hormone receptors have at least one functional domain*
- C. K_d (a measure of affinity) of hormone receptor interaction is very low*
- D. Hormones have very similar structures to other molecules in the body*
- E. Hormones are affected by dilution of plasma*

15. Most common site for thyroglossal cysts:

Answer: Inferior to body of hyoid bone

16. Wrong about thyroid gland:

A. Enlargement of the thyroid gland can reach to the hyoid bone

B. Inferior part of thyroid gland is supplied from branch of the thyrocervical trunk

C. Sympathetic nerve supply control the blood flow to the gland but don't directly affect hormone secretion

D. Common carotid artery represents a posterolateral relation with the gland

E. esophagus lie medial to the gland

17. Ligament of berry of the thyroid gland has surgical importance due to its relation to which nerve?

Answer: Recurrent laryngeal nerve

18. One of the following gland synthesize its hormones extracellularly:

Answer:Thyroid gland

19. Which of the following mostly stimulates ADH secretion?

Ans: increase in plasma osmolality
from 295 to 305 and 30% decrease
in blood volume due to Hemorrhage

20. Patient who had pituitary macroadenoma, then came and presented with severe headache, right side ptosis and dyplopia. Whats the condition that most likely caused these symptoms?

Answer :Pituitary apoplexy
(pituitary Hemorrhage that lead to
extravasation of the blood laterally
leading to compression on
oculomotor nerve in the cavernous
sinus.)

21. In cAMP second messenger pathway, Whats the immediate effect of activation of protein kinase?

*Ans: protein kinase
phosphorylates target
protein

22. What's the direct effect of activation of phospholipase C?

*Ans: production
of diacylglycerol
and inositol
triphosphate.

23. Decreased ionized calcium in the blood along with the increase in PTH , whats most likely the cause?

- A. Calcitonin deficiency
- B. Excess vitamin D
- C. Vitamin D deficiency
- D. Primary hyperparathyroidism
- E. Hypoparathyroidism

24. Someone's brother(My Allah bless your family) has DM-type 1, and suddenly had hypoglycaemia, u have only 10 ml injection of glucagon. After injecting him, what's most likely will be activated?

**Ans: increased glycogenolysis and gluconeogenesis*

25. Which of the following conditions produces parallel effects (both increased or both decreased) on plasma aldosterone and cortisol?

A. Addisons disease

B. Cushing syndrome

26. One of the following is Odd:

A. Cortisol

B. DHEA

C. Corticosterone

D. Dexamethazone

E. Aldosterone

27-Which of the following hormones, when secreted in excess, is responsible for galactorrhea (inappropriate milk secretion) in males or non-pregnant females?

Answer :Prolactin

28. Implementation of pituitary gland in the leg, which of the following hormones will be increased?

Answer:Prolactin

29. A patient who is in middle age , presented with enlarged supraorbital ridges and mandible and he said that he had to change his shoe size to a bigger one . What's the hormones that regulate the hormone that caused this condition?

Ans: GHRH & Somatostatin

30. Which of the following hormones is not part of hypothalamic- pituitary- thyroid axis?

A. Calcitonin

B. TSH

C. T4

D. Triiodothyronine

E. Thyroid releasing hormone

31. Which of the following hormones have longest half life?

A. Insulin

B. Glucagon

C. Progesterone

D. Epinephrine

Answer:C

32. One of the following is a direct effect of PTH:

A. Increase calcium absorption through intestinal cells

B. Decrease activity of alpha-1- hydroxylase

C. Increase activity of oscteoclasts

33. Oxytocin and vasopressin have common thing, what it?

A. Disulfide bond

B. Single tyrosine residue

Answer: Both are correct

34. A patient is taking exogenous insulin, if we want to measure his endogenous insulin, what we do?

**Ans: measure the C peptide*

35. If we inject a healthy individual with radioactive iodine, most of it will end up in?

Answer: Thyroid gland

36. The permissive effect is?

**Ans: one hormone precedes other hormone to enhance it's effect*

37. If a certain chemical blocked the step of conversion of cholesterol into pregnenolone, what will be increased?

- A. Cortisol*
- B. Aldosterone*
- C. Renin*
- D. DHEA*

Answer:C

38. Which of the following is a characteristic of zona fasciculata?

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**Ans: Cells with Foamy appearance and arranged in elongated cords*

39. A person ate 4 sugar donuts and a cup of sugar drink(like coke), which hormone will be secreted as a response on this huge sugar amount ?

Answer:Insulin

40. Testosterone is a lipid soluble hormone, it can gain entry to all cells but only can exert effect on target cells. Why this?

*Ans: the target cells contain the intracellular receptor for testosterone

For any feedback, scan the code or click on it.



Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1			
V1 → V2			