



TEST BANK



Subject:

Endocrine-
FINAL 019

**Collected
by**



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1-All the following are considered as mechanisms of action of the sulfonylureas except:

- a.Increase insulin receptor number and the affinity to insulin
- b.Induction of glucagon secretion by pancreas
- c.Inhibition of glucagon secretion by pancreas α cells
- d.Ameliorating insulin resistance
- e.Direct stimulation of insulin release from the pancreatic B-cells

2-All the following are among the signs of Diabetes mellitus except:

- a.Feeling very thirsty
- b.Feeling very active
- c.Using the toilet often to urinate
- d.High level of glucose in urine and in fasting blood
- e.Constant hunger

3-Which of the following is False about Hyperaldosteronism?

- a.Secondary hyperaldosteronism can be caused by renal artery stenosis
- b.Secondary hyperaldosteronism is characterized by high renin
- c.The most common cause of primary hyperaldosteronism is adrenocortical adenoma
- d.The most common manifestation of hyperaldosteronism is hypertension
- e.Primary hyperaldosteronism can be familial

4-What must happen instantly in order to prevent overstimulation by a hormone?

- a.Hormones must be degraded and then resynthesized.

- b.G-proteins must be recycled and then degraded.
- c.Receptors must dimerize.
- d.Receptors must be blocked from continuing to activate G-proteins.
- e.New receptors must be synthesized to decrease the saturation effect of the hormone.

5-Which of the following is false about histology of pituitary adenomas?

- a.The atypical subtype is characterized by TP53 mutations
- b.The functional status can't be predicted from its histology
- c.Characterized by significant amount of reticulin network
- d.The atypical subtype is characterized by brisk mitoses
- e.Cellular monomorphism

6-Which of the following is False about thyroid nodules?

- a.Hot nodules are more likely to be benign
- b.Nodules in males are more likely to be neoplastic than are those in females
- c.Nodules in very young and elderly people are more likely to be non-neoplastic
- d.Solitary nodules are more likely to be neoplastic than are multiple nodules
- e.History of radiation exposure is associated with increased risk of thyroid malignancy

7-Which of the following is the most common cause of endogenous Cushing syndrome?

- a.ACTH -producing pituitary adenoma (Cushing disease)
- b.Primary nodular adrenocortical hyperplasia

- c.Primary diffuse adrenocortical hyperplasia
- d.Adrenocortical adenoma
- e.Adrenocortical carcinoma

8-Which of the following is False about Medullary thyroid carcinomas?

- a.Some familial cases are associated with MEN 1 syndrome
- b.Multicentricity is common in familial cases
- c.Are neuroendocrine tumors
- d.Sporadic cases affect adults
- e.They secrete calcitonin

9-The following hormones have permissive effects:

- a.Testosterone and estrogen
- b.Oxytocin and vasopressin
- c.Insulin and glucagon
- d.Epinephrine and serotonin
- e.Thyroxine and epinephrine

10-Regarding Lacotrophs, which is true:

- a.they are the Site of production of T4
- b.they are the Site of production of TRH
- c.they are the Site of production of prolactin
- d.they are the Site of production of growth hormone
- e.they are the Site of production of T3

11-Regarding Diabetes mellitus which is false?

- a.Type 1 Diabetes mellitus happen due to Lack of insulin
- b.Type 2 Diabetes mellitus happen due to Lack of insulin
- c.Diabetes mellitus is a syndrome of disordered metabolism
- d.Among Diabetes Signs; feeling Very thirsty
- e.Diabetes mellitus could happen due to hereditary and environmental causes

12-The most common cause of Addison disease is:

- a.Tuberculosis
- b.Fungal infection
- c.Metastatic carcinoma
- d.AIDS
- e.Autoimmune adrenalitis

13-Regarding the pharmacological actions of steroids, which is false?

- a.Glucocorticoids used to suppress inflammation
- b.Beclometasone is better used orally than topically
- c.Glucocorticoids used to suppress allergy
- d.Glucocorticoids used in cases of tissue transplantation and lymphopoiesis
- e.Glucocorticoids used in cases of eye and skin inflammations

14-Regarding the steps involved in Synthesis of thyroid hormones which is false?

- a.T4 and T3 are released into the circulation
- b.Newly formed Tg is transported to the cell surface in small apical vesicles

- c.T4 and T3 are released into the Golgi bodies
- d.Iodide is taken up at the basolateral cell membrane
- e.Polypeptide chains of Tg (thyroglobulin) are synthesized in the rough endoplasmic reticulum

15-About the development of the suprarenal glands, choose the wrong statement:

- a.Accessory tissue of the suprarenal gland may be found in gonads
- b.Its medulla originates from neural crest
- c.Its cortex has a mesodermal origin
- d.Some chromaffin cells migrate and invade the medulla of the suprarenal gland
- e.The acidophilic mesothelial cells will form the future glomerular and fascicular zones of the definitive cortex

16-The most common cause of death in diabetic patients:

- a.Chronic renal failure
- b.Hyperosmolar coma
- c.Myocardial infarction
- d.Diabetic ketoacidosis
- e.Disseminated infections

17-The most common cause of hypothyroidism where iodine levels are sufficient is:

- a.Reidle thyroiditis
- b.Sub-acute granulomatous thyroiditis
- c.Palpation thyroiditis

d.Hashimoto thyroiditis

e.Painless thyroiditis

18-Which of the following is not an adverse reaction of insulin?

a.Hyperglycemia

b.Lipodystrophy

c.Insulin resistance

d.Nausea, hungry, tachycardia

e.Itching, redness, swelling, anaphylaxis shock

19-The blood supply of the suprarenal glands, choose the correct statement:

a.The inferior suprarenal artery is a branch from the muscophrenic artery.

b.The right and left suprarenal glands drain into the renal veins.

c.The medulla has a single blood supply.

d.The arterial and venous capillaries within the adrenal gland enable it to convert norepinephrine to epinephrine.

e.The suprarenal gland receives the lowest blood supply in the body.

20-The most common cause of primary hyperparathyroidism is:

a.Parathyroid carcinoma

b.Nodular parathyroid hyperplasia

c.Chronic renal failure

d.Diffuse parathyroid hyperplasia

e.Parathyroid adenoma

21-The suprarenal glands, choose the correct statement:

- a.The diaphragm lies posterior to both suprarenal glands.
- b.Found at the level of the 9th rib.
- c.The inferior vena cava lies anteriolaterally to the right suprarenal gland.
- d.They are located introperitoneally.
- e.Both glands reach the hilum of the kidney.

22-Regarding Thyrotrophs, which is true?

- a.they are the Site of TRH synthesis
- b.they are the Site of growth hormone synthesis
- c.they are the Site of T3 synthesis
- d.they are the Site of TSH synthesis
- e.they are the Site of prolactin synthesis

23-Which of the following is false about pituitary adenomas?

- a.Usually solitary (Single)
- b.The cutoff point in the size between microadenomas and macroadenomas is 1 cm
- c.Might be plurihormonal
- d.The most common type is somatotroph adenomas
- e.Might be non-secretory

24-Regarding thyroid gland, which is false?

- a.The thyroid gland secretes growth hormone
- b.The thyroid gland secretes thyroxine

- c. Every tissue in the body is affected in some way by thyroid hormones
- d. The thyroid gland secretes Calcitonin
- e. The thyroid gland secretes triiodothyronine

25-Regardless of how a signal is initiated, the ligand-binding event is propagated via second messengers or protein recruitment. What is the ultimate, or final biochemical outcome of these binding events?

- a. A protein at the bottom of an intracellular signaling pathway is activated.
- b. A protein at the top of an intracellular signaling pathway is activated.
- c. A protein at the top of an extracellular signaling pathway is activated.
- d. A protein in the middle of an intracellular signaling pathway is activated.
- e. A protein at the top of an intracellular signaling pathway is deactivated.

26-Regarding VITAMIN D3, which is false?

- a. Vitamin D3 inhibits intestinal calcium absorption
- b. Vitamin D3 plays an important role in maintaining calcium homeostasis
- c. Vitamin D3 Enhances intestinal calcium absorption
- d. Vitamin D3 enhances calcium reabsorption in the kidney
- e. Vitamin D3 active metabolite is named 1,25-(OH)₂D₃

27-Which of the following about pathogenesis of type 1 diabetes is false?

- a. It is an autoimmune disease
- b. Production of autoantibodies against insulin
- c. Characterized by extensive clonal deletion of self-reactive T lymphocytes
- d. Characterized by abnormalities in regulatory T lymphocytes
- e. Production of autoantibodies against enzyme glutamic acid decarboxylase

28-All of the following are signs and symptoms of pituitary adenomas or carcinoma except:

- a.Cranial nerve palsies
- b.Decrease intracranial pressure
- c.Pituitary apoplexy
- d.Sellar expansion
- e.Seizures

29-All of the following are features of Myxedema Except:

- a.Decreased sweating
- b.Mental sluggishness
- c.Diarrhea
- d.Pale skin
- e.Apathy

30-Regarding parathyroid glands, which is true:

- a.PTH is secreted in response to high glucose
- b.PTH is secreted in response of high T4
- c.PTH is secreted from the thyroid glands in response to a low plasma concentration of ionized (free) calcium
- d.PTH is secreted from the parathyroid glands in response to a high plasma concentration of ionized (free) calcium
- e.PTH increases rates of dietary calcium absorption

31-All the following are among the pharmacological actions of insulin except:

- a.Diminish hepatic glycogenolysis

- b. Inhibit lipolysis
- c. Induction of gluconeogenesis
- d. Inhibit hepatic gluconeogenesis
- e. Promote hepatic glucose storage into glycogen

32- This is the largest hormone in size:

- a. Angiotensin I
- b. Thyroxine
- c. Dihydrotestosterone
- d. Glucagon
- e. Vasopressin

33- What happens to protein kinase A (PKA) following the binding of cAMP?

- a. The regulatory subunits of PKA dissociate, thereby activating the catalytic subunits.
- b. The stimulatory regulatory subunits dissociate from the catalytic subunits, inhibiting the enzyme.
- c. PKA catalytic subunits then bind to two regulatory subunits, thereby activating the catalytic subunits.
- d. Phosphodiesterase binds to the catalytic subunits, which results in enzyme inactivation.
- e. The inhibitory regulatory subunits dissociate from the catalytic subunits, completely inactivating the enzyme.

34-autocrine signaling (choose the best answer that describes it):

- a. Messenger molecules travel only short distances through the extracellular space to different cell types that are in close proximity to the cell that is generating the message.
- b. The cell producing the messenger expresses receptors on its surface that can respond to that messenger.
- c. Messenger molecules reach their target cells via passage through bloodstream.
- d. The messenger molecules are usually rapidly degraded and hence can only work over short distances.
- e. No answer describes it well.

35-Where is the kinase catalytic domain of the receptor protein-tyrosine kinases found?

- A. On the extracellular surface of the receptor, immediately adjacent to the ligand-binding domain.
- B. On the cytoplasmic domain of the receptor.
- C. On an independent protein that rapidly binds the receptor upon ligand binding.
- D. Within the transmembrane spanning portion of the receptor.
- E. On the DNA binding domain

36-Which of the following is false about Graves' disease?

- a. The serum levels of TSH binding inhibitor immunoglobulins might be high in some cases
- b. Characterized by infiltrative ophthalmopathy disappears after treatment of thyrotoxicosis
- c. Low TSH
- d. Characterized by thyrotoxicosis in all cases
- e. Characterized by diffuse iodine uptake

37-All the following are among the Chronic complications of Diabetes mellitus except:

- a. Strokes
- b. Coronary heart disease
- c. Renal failure
- d. Diabetic ketoacidosis
- e. Poor wound healing

38-Which of the following statements is False?

- a. One cause of secondary diffuse hyperplasia in adrenal glands is Cushing disease
- b. After exogenous administration of cortisol, the adrenal glands show bilateral diffuse hyperplasia
- c. Cushing disease is ACTH dependent cause of Cushing syndrome
- d. Primary adrenal hyperplasia may show micronodules or macronodules
- e. Primary adrenal hyperplasia is ACTH independent cause of Cushing syndrome

39-Typically, what is the first reaction after most receptor protein tyrosine kinases bind their ligand?

- a. Receptor denaturation
- b. Receptor degradation
- c. Receptor dimerization
- d. Receptor dissociation
- e. Receptor trimerization

40-which of the following does not cause hyperprolactinemia?

- a. Pregnancy
- b. High dose estrogen therapy
- c. Reserpine
- d. Dopamine
- e. Stalk effect

41-Choose the wrong statement about Zona Fasciculata:

- a. Its cells are typical steroid synthesizing cells.
- b. Its cells cytoplasm contains lipid droplets.
- c. Its cells are arranged in circles.
- d. It is the thickest middle zone that forms around 80% of the cortex.
- e. Its cells secrete glucocorticoids, mainly cortisol.

42-Which of the following sentences is true?

- a. Insufficiency of thyroid hormones result in Primary hyperthyroidism
- b. Cretinism is a condition of stunted mental growth due to untreated congenital deficiency of thyroid hormones
- C. Myxedema is a term used with severe hyperthyroidism
- d. Thionamides are the primary drugs used to increase thyroid hormone production
- e. Cretinism is a condition of stunted mental growth due to untreated congenital increase of thyroid hormones

43-Which of the following are not gonadotropins?

- a. Follicle-stimulating hormone (FSH)

- b. Human chorionic gonadotropin(hCG)
- c. Growth hormone
- d. Luteinizing hormone (LH)
- e. TSH

44-Which of the following is False about thyroid follicular carcinomas?

- a. Is more frequent in iodine deficient regions
- b. More common in women
- c. Tend to metastasize through lymphatics
- d. Are composed of small follicles
- e. Might be widely invasive or minimally invasive

45-Sheehan syndrome is a complication of the following pituitary adenoma:

- a. ACTH secreting adenoma
- b. TSH secreting adenoma
- c. LH secreting adenoma
- d. Prolactinoma
- e. Somatotroph cell adenoma

46-Which of the following statements is false?

- a. Blood glucose levels equal or more than 200 mg/dl on oral glucose tolerance test means diabetes
- b. Fasting blood sugar of 126 mg/dl or more means diabetes
- c. Random blood sugar equals or more than 200 mg/dl means diabetes
- d. Glycated HBA1C in diabetes is between 5.7 and 6.4

e. The normal blood sugar is maintained between 70 to 120 mg /dl

47-Which of the following is False about obesity and insulin resistance?

- a. Increase in intracellular triglycerides inhibits insulin signaling and mediate insulin resistance
- b. Increased adiponectin mediates insulin resistance
- c. Inflammation with increases in IL-1B mediates insulin resistance
- d. Inflammation with cytokine production increases insulin resistance
- e. Excess free fatty acids are important in insulin resistance

48-The anterior pituitary gland is connected to the hypothalamus by:

- a.hypothalamoanterior connective tissue
- b.skeletal muscle
- c.pituitary fat tissue
- d.hypothalamoanterior nerves
- e.hypothalamoanterior pituitary portal vessels

49-The inferior parathyroid glands, choose the wrong statement:

- a.They contain chief and oxyphil cells.
- b.Most of their blood supply comes from branches of inferior thyroid artery.
- c.The inferior parathyroid glands occasionally migrate to the level of the aortic arch.
- d.They are usually ventral to the nerve that accompanies the inferior thyroid artery.
- e.They are derived from the dorsal wing of the fourth pharyngeal pouch.

50-The type of thyroiditis that might occur in postpartum period is:

- a.painless thyroiditis
- b.sub-acute granulomatous thyroiditis
- c.hashimoto thyroiditis
- d.riedlle thyroiditis
- e.palpation thyroiditis

ANSWERS

1-B	11-B	21-A	31-C	41-C
2-B	12-E	22-D	32-D	42-B
3-C	13-B	23-D	33-A	43-C
4-D	14-C	24-A	34-B	44-C
5-C	15-E	25-A	35-B	45-D
6-C	16-C	26-A	36-B	46-D
7-A	17-D	27-C	37-D	47-B
8-A	18-A	28-B	38-B	48-E
9-E	19-D	29-C	39-C	49-E
10-C	20-E	30-E	40-D	50-A

PRACTICAL PART

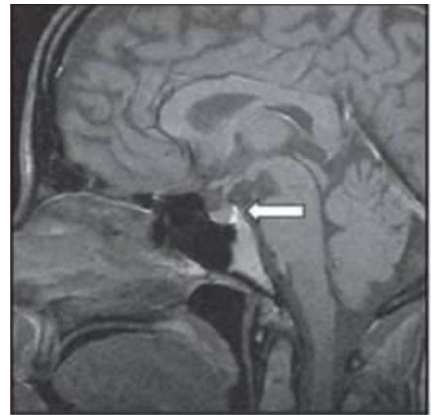
1-The pointed structures are:

- a. splenic arteries
- b. Renal arteries
- c. Pancreases
- d. kidneys
- e. Suprarenal glands



2-The indicated spot is absent in individuals with?

- a. Sheehan syndrome
- b. Craniopharyngioma
- c. Bitemporal hemianopsia
- d. Central diabetes insipidus
- e. pituitary Adenoma of the anterior lobe



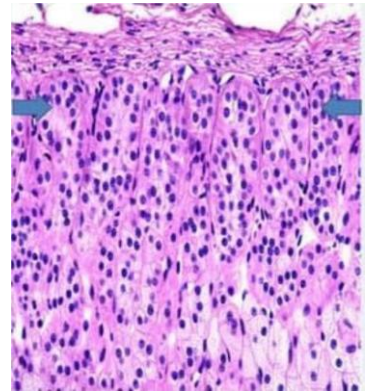
3-The pointed area contains:

- a. Pituitary gland
- b. Cavernous sinus
- c. Pineal gland
- d. Sphenoidal air sinus
- e. Optic chiasma



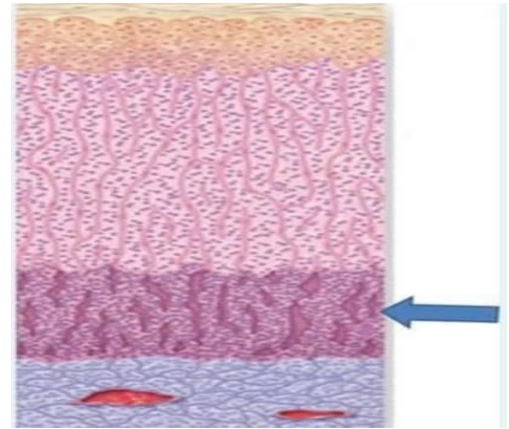
4-The area between the pointed arrows produces:

- a. Cortisol
- b. Parathormone
- c. Melatonin
- d. Androgen
- e. aldosterone



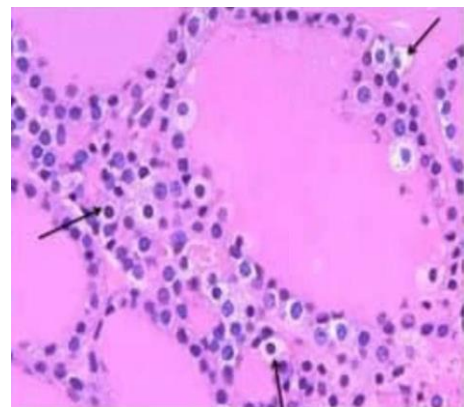
5-The pointed area produces:

- a. Cortisol
- b. Androgen
- c. Aldosterone
- d. Epinephrine
- e. Norepinephrine



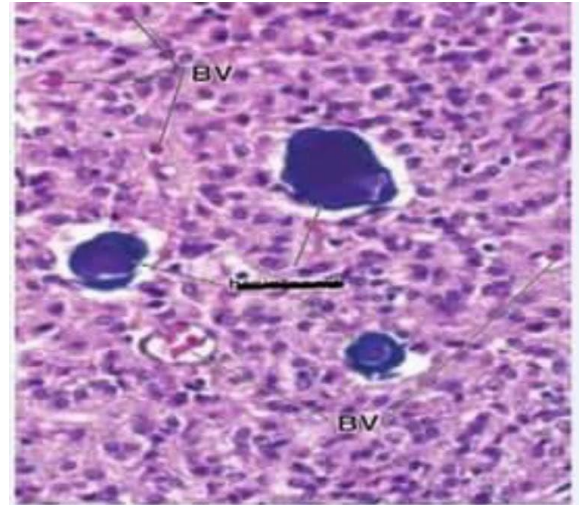
6-The pointed cells produce:

- a. Calcitonin
- b. Parathyroid hormone
- c. Thyrotropin
- d. Thyroxine
- e. Growth hormone



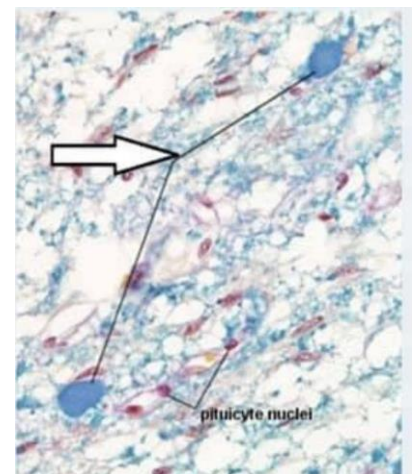
7-This section is taken from:

- a. Parathyroid gland
- b. Pineal gland
- c. Thyroid gland
- d. Pituitary gland
- e. Suprarenal gland



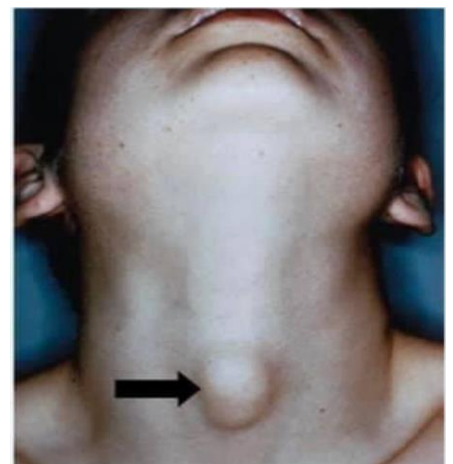
8-The pointed structures contain:

- a. FSH and LH
- b. Growth hormone
- c. Prolactin
- d. ADH and oxytocin
- e. Melatonin



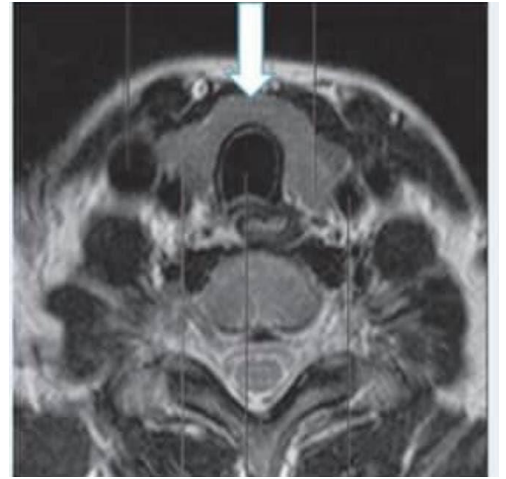
9-The pointed structure could be:

- a. Aberrant thyroid tissue
- b. Thyroglossal cyst
- c. Branchial fistula
- d. Lingual thyroid gland
- e. Parathyroid sinus



10-On this MRI, the pointed structure is:

- a. Left thyroid lobe
- b. Isthmus of thyroid gland
- c. Esophagus
- d. Right thyroid lobe
- e. Trachea



ANSWERS

1-E	2-D	3-A	4-D	5-B
6-A	7-B	8-D	9-B	10-B

اللهم لك الحمد من أعماق الفؤاد حتى عرشك المقدس