



# الطب والجراحة لجنة

Endocrine System – Final Exam

دفعه نبض 2019

Question 1

Which statement about eicosanoids is not correct?

Select one:

- a. Some of them have diverse effects
- b. All of the molecules are unsaturated
- c. The parent molecule contains 20 carbon atoms
- d. Eicosatrienoic acid is a precursor to arachidonic acid
- e. Eicosanoids function as local hormones

Question 2

Intermediates of which of the following metabolic pathway have not been used in the synthesis of amino acids?

Select one:

- a. Gluconeogenesis
- b. Pentose phosphate pathway
- c. Citric acid cycle
- d. Fatty acid biosynthesis
- e. Glycolysis

Question 3

Which one of the following is not a secondary messenger in hormone action?

Select one:

- a.cAMP
- b.Calcium
- c.Sodium
- d.DAG
- e.cGMP

Question 4

Which of the following is produced only by large amounts of glucocorticoids?

Select one:

- a.Increased excretion of a water load
- b.Normal responsiveness of fat depots to norepinephrine
- c.Inhibition of the inflammatory response
- d. Maintenance of normal vascular reactivity
- e.Stimulation of ACTH secretion

Q:5

A patient with parathyroid deficiency after damage to the parathyroid glands during thyroid surgery would probably have?

Select one:

- a. Increased muscular excitability, a high plasma  $\text{Ca}^{2+}$  level, and bone demineralization
- b. High plasma phosphate and  $\text{Ca}^{2+}$  levels and bone demineralization
- c. Low plasma phosphate and  $\text{Ca}^{2+}$  levels and tetany
- d. Low plasma phosphate and  $\text{Ca}^{2+}$  levels and tetanus
- e.A low plasma  $\text{Ca}^{2+}$  level, increased muscular excitability, and spasm of the muscles of the upper extremity (Trousseau sign)

Question 6

The following pathway occurs in the mitochondrial matrix?

Select one:

- a.Glycolysis
- b. Citric acid cycle
- c.PPP
- d.Glycogenolysis
- e.Glycogenesis

Question 7

The net result of ATP molecules generated from the splitting of two glucose molecules to 4 pyruvate molecules via the glycolysis pathway are?

Select one:

- a. 8 ATP molecules
- b. 2 ATP molecules**
- c. 6 ATP molecules
- d. 12 ATP molecules
- e. 4 ATP molecules**

Answer: E

#### Question 8

Oligomycin inhibits the mitochondrial ATP synthase. Which of the following would be an immediate effect of oligomycin in normal mitochondria?

Select one:

- a. Decreased rate of electron transport
- b. Decreased rate of ATP/ADP exchange
- c. Decreased rate of ATP synthesis
- d. Decreased proton gradient
- e. Decreased rate of oxygen consumption**

Answer: C

Q:9

Complete oxidation of one glucose molecule in \_\_\_\_\_ and \_\_\_\_\_ tissues generate 30 ATP molecules due to shuttle?

Select one:

- a. Brain, hepatic, DHAP/G3P
- b. Cerebral, skeletal muscle, DHAP/G3P
- c. Heart, brain, DHAP/G3P
- d. Cardiac, hepatic, aspartate/malate
- e. Liver, skeletal muscle, aspartate/malate

Answer: D

Q:10

The omega-oxidation is a type of fatty oxidation. It requires all the following except?

Select one: غير مطلوب

- a. NADPH
- b. NAD
- c. Mixed function oxidase
- d. Alcohol dehydrogenase
- e. Cytochrome P450

Answer: D

Question 11

Which of the following is the precursor of thyroid hormone?

Select one:

- a. DOPA
- b. Threonine
- c. Tryptophan

d. Glutamine

e. Tyrosine

Question 12

Excessive secretion of aldosterone gives rise to?

Select one:

a. Polyuria

b. Hyperkalaemia

c. Hypotension

d. Normal muscular performance

e. Alkalosis

Question 13

Carbimazole: Which of the following is false?

Select one:

a. Is converted to its active metabolite methimazole in liver

b. Can cause agranulocytosis as adverse effect

c. Can increase size of primary toxic goiter in overdose

d. Inhibits thyroid gland peroxidase

e. Is preferred to propylthiouracil for hyperthyroidism during pregnancy

Question 14

In non-oxidative phase of PPP, the ribulose sugar molecules are recycled to the following intermediates to join the glycolysis?

Select one:

a. Xylulose-5-phosphate and ribose-5-phosphate

b. Glyceraldehyde-3-phosphate and glucose-6-phosphate

c. Fructose-6-phosphate and pyruvate

d. Glyceraldehyde-3-phosphate and fructose-6-phosphate

e. Glyceraldehyde-3-phosphate and sedoheptulose-7-phosphate

Q:15

About 70% of the iodide in thyroglobulin exists in form of?

Select one:

a. DIT

b. MIT

Flag question

c. MIT and DIT

d. T3

e. T4

Question 16

UDP-glucose is the substrate for the following two enzymes?

Select one:

- a. Galactokinase and glucokinase
- b. Glycogenin and glycogen phosphorylase
- c. Glycogen synthase and glycogenin
- d. Glycogen synthase and glycogen phosphorylase
- e. Glycogen synthase and fructokinase

Question 17

All following are effects of cortisol EXCEPT?  
Select one:

- a. Delay wound healing
- b. Reduces inflammatory response
- c. Increase lymphocytes
- d. Skin atrophies
- e. Promotes gluconeogenesis

Question 18

How many ATP are converted to AMP and PPI to form arginosuccinate in urea cycle?  
Select one:

- a. 1
- b. 2
- c. 6
- d. 4
- e. 3

Question 19

A 25-year-old female has been experiencing frontal headaches for 9 months, with worsening symptoms in the last 2 months she had multiple emergency visits where she had high blood pressure reaching 187/139 mmHg sometimes. Examination revealed normal BMI and no skin lesions and she had no menstrual abnormalities. Serum creatinine, sodium and potassium are within normal limits. Which of the following findings would you most expect to be present in this patient?  
Select one:

- a. Neck mass found to be 2 cm hot thyroid nodule
- b. Neck mass found to be 3 cm carotid body mass
- c. Bilateral adrenal masses found to be breast cancer metastasis
- d. Multiple infiltrative lung masses
- e. Bilateral hemorrhagic necrosis of adrenal glands

Answer: E

Question 20

One of the following is correct about congenital adrenal hyperplasia?  
Select one:

- a. All precursor steroids are channelled into sex steroid synthesis

- b. Most cases in males lead to infertility.
- c. Decrease androgenic activity causes virilization symptoms
- d. 21-hydroxylase is required for synthesis of cortisol but not aldosterone
- e. High serum cortisol leads to decrease secretion of ACTH.

Question 21

These two enzymes are expressed mainly in liver?

Select one:

- a. Hexokinase IV and glucose-6-phosphatase
- b. Hexokinase II and fructokinase
- c. Glucose-6-phosphatase and phosphofructokinase-1
- d. Glucokinase and phosphofructokinase-1
- e. Fructokinase and phosphofructokinase-1

Question 22

All the following drugs and hormones induced diabetes mellitus except?

Select one:

- a. Glucagon
- b. Beta blockers
- c. Glucocorticoids
- d. Penicillin
- e. Oral contraceptive

Question 23

Which of the following is true regarding thyroid nodule?

Select one:

- a. Hot nodules are more likely to be malignant
- b. Most of the nodules arising from C cells
- c. Nodules in males are more likely to be malignant
- d. Nodules in older patients are more likely to be benign
- e. Multiple nodule is more likely to be neoplastic than solitary

Question 24

Which out of the following amino acids is not converted to succinyl CoA?

Select one:

- a. Isoleucine
- b. Histidine
- c. Methionine
- d. Threonine
- e. Valine

Question 25

Which of the following statements about glycogen metabolism is correct?

Select one:

- a. In muscle in the fasting state, glycogen is broken down to glucose 6-phosphate, then free glucose
- b. Insulin inhibits the synthesis of glycogen
- c. Glucagon increases the synthesis of glycogen
- d. A key step in the synthesis of glycogen is the formation of UDP-glucose
- e. Glycogen is stored mainly in the liver and brain

Question 26

What hormone does the parathyroid produce?

Select one:

- a. PTH
- b. PFH
- c. Calcitonin
- d. Thyroxin
- e. Insulin

Question 27

All followings are correctly combined (Disease: main symptom or sign), except?

Select one:

- a. Hashimoto thyroiditis: Exophthalmos
- b. Pheochromocytoma: paroxysmal attacks of increased Blood pressure
- c. Sheehan syndrome: Inability to breast-feed
- d. Congenital hypothyroidism: Cretinism
- e. Acromegaly: Large bone and Jaw

Question 28

Dental caries can be avoided by using?

Select one:

- a. Fluoride containing toothpaste
- b. Iodide containing toothpaste
- c. Zinc containing toothpaste
- d. Calcium containing toothpaste
- e. Bromide containing toothpaste

Question 29

Thyropoxidase, choose the wrong statement?

Select one:

- a. Stimulates the coupling of two DIT molecules to form T4
- b. Stimulates the coupling of MIT and DIT to form T3
- c. Stimulates lysosomes fuse with thyroglobulin vesicles and the release of free T4 and T3O
- d. Uses H<sub>2</sub>O<sub>2</sub> for its oxidation reaction

e.Oxides iodide to iodine

Q:30

All are true about Thyroid swelling except?

Select one:

- a. More common in females than males
- b. Physiological goitre is due to decrease of thyroxine level
- c. Most common neck swelling in adults
- d. Malignant swelling is associated with thyrotoxicosis
- e. Majority are benign swelling

Answer: C

Q:31

In an elderly patient with primary hypothyroidism: Which statement is true?

Select one:

- a. Plasma TSH is low and goiter is usually present
- b. Overdose with thyroid hormone can cause exophthalmous
- c. Treatment is began usually with small doses of triiodothyronine to get quick relief
- d. Treatment is started with small dose of T4 and slowly increased to avoid cardiac arrhythmia
- e. The half-life of oral l-thyroxine is usually not affected

Question 32

The following are true about the hormones secreted by the adrenal cortex EXCEPT?

Select one:

- a. Secretion of aldosterone is stimulated by ACTH
- b. Zona glomerulosa secretes aldosterone
- c. Cortisol increases sodium resorption from the renal tubules
- d. Zona fasciculata secretes cortisol
- e. Cortisol secretion reaches a maximum at 6:00pm

Question 33

Dorsal pancreatic bud gives all except? غير مطلوب

Select one:

- a. Neck of pancreas
- b. Body of pancreas
- c. Tail of pancreas
- d. Uncinate process of pancreas
- e. Upper part of head of pancreas

Question 34

Which one of the following is a definition of glycaemic index?

Select one:

- a. The increase in blood insulin concentration after consuming the food
- b. The decrease in blood glucagon concentration after consuming a food compared with that after consuming an equivalent amount of white bread
- c. The increase in blood glucose concentration after consuming the food compared with that after consuming an equivalent amount of white bread**
- d. The increase in blood insulin concentration after consuming the food compared with that after consuming an equivalent amount of white bread
- e. The increase in blood glucose concentration after consuming the food

Question 35

Insulin?

Select one:

- a. Inhibits entry of potassium into cells
- b. Facilitates protein anabolism**
- c. Has the same effect on blood sugar as growth hormone
- d. Secretion is not affected by catecholamines
- e. Decreases deposition of fats

Question 36

Which of the following cells can be classified as Acidophils?

Select one:

- a. Gonadotrophs
- b. Corticotrophs
- c. Clear cells
- d. Thyrotrophs
- e. Somatotroph**

Question 37

A 7-year-old boy is evaluated for short stature. His average circulating growth hormone level is within the normal range for his

age, but levels of Somatomedins are reduced. His growth failure is most likely due to a defect in?

Select one:

- a. Androgen synthesis
- b. GHRH release from the hypothalamus
- c. Growth hormone receptors**
- d. GHRH receptors
- e. Estrogen synthesis

Question 38

In elderly patient, the most common system affected with thyrotoxicosis is?

Select one:

a. Cardiovascular system

b. Musculoskeletal system

c. Respiratory system

d. Digestive system

e. Nervous system

Question 39

Peptides and proteins hormones? choose the wrong statement

Select one:

a. They are made from three to over 200 amino acids

b. Are the most numerous hormones

c. Most peptide hormones are water-soluble

d. Their synthesis require gene transcription

e. Their secretion do not require stimulation

Question 40

In the rate limiting reaction of PPP, the G6P dehydrogenase enzyme is activated by high level of?

Select one:

a. ATP

b. NAD<sup>+</sup>

c. NADPH

d. NADP<sup>+</sup>

e. NADH

Question 41

It is NOT the most abundant cell type in parathyroid gland?

Select one:

a. Chromaffin cells

b. Oxyphil cell

c. Follicular cells

d. Parafollicular cells

e. Chief cells

Question 42

Cholinesterase is among the enzymes that can be used as biomarkers for the diagnosis of diseases, what is correct about this

enzyme?

Select one:

a. It is present only in red blood cells

b. It shows high activity during pregnancy

c. Its plasma level is high in cases of organophosphorus poisoning

d. It has a high plasma activity in liver dysfunction

e. It is a nonspecific enzyme

Question 43

All the followings are TRUE about diabetes, EXCEPT?

Select one:

- a. Diabetes mellitus in pregnancy is defined by the same criteria as in non-pregnant persons
- b. It is an old disease known as early as the 5th century AD
- c. T1DM onset occur in childhood only
- d. We use (unclassified diabetes) category temporarily when there is not a clear diagnostic category
- e. Nearly 3% of global blindness can be attributed to diabetic retinopathy

Question 44

G-protein coupled receptors(GPCRs)? choose the wrong statement

Select one:

- a. Growth factors, odorant molecules and light can activate these receptors
- b. Hormones binds to N-terminal of the receptor
- c. The polypeptide loop E2 connect H3 and H4 membrane-spanning a-helix domains
- d. Are the largest family of cell-surface receptors
- e. The extracellular part contain the N-terminal

Question 45

Concerning calcitonin, all the followings are true EXCEPT?

Select one:

- a. It is released in response to decreased blood calcium
- b. It is formed in the thyroid gland
- c. It is used in treatment of PAGET Disease
- d. It is a polypeptide hormone
- e. It decreases renal calcium absorption

Question 46

DNA binding domain (DBD) of the nuclear receptor? choose the wrong statement

Select one:

- a. Mediates specific recognition of the HRE mostly in the minor groove of the DNA
- b. Stabilizes binding to HRE of DNA
- c. Contains the nuclear localization signal domain
- d. Mediates dimerization
- e. Has two zinc fingers each is 10-20 amino acids long

Question 47

The final product for complete oxidation of odd chain fatty acids yields which of the following?

Select one:

- a. Acetyl CoA and propionyl CoA
- b. Acetyl CoA only

c. Succinyl CoA

d. Propionyl CoA only

e. Palmitoyl CoA

Answer: A

Question 48

The following are causes of hyperprolactinemia except?

Select one:

a. Hypothyroidism

b. Oestrogens

c. Basophil microadenoma of pituitary

d. Galactorrhea-amenorrhea syndrome

e. Haloperidol

Question 49

The molecule that functions as the electron donor in a redox reaction of the electron transport chain?

Select one:

a. Gains electrons and gains energy

b. Loses electrons and loses energy

c. Loses electrons and gains energy

d. Gains electrons and loses energy

e. Neither gains nor loses electrons, but gains or loses energy

Question 50

Second messengers, choose the wrong statement?

Select one:

a. They are the ones that bring out the cellular responses

b. They affect gene transcription

c. Are nonprotein molecules

d. Are often not free to diffuse to compartments of the cell

e. Signal may be amplified significantly in the generation of second messengers

Question 51

The thyroid gland lies against the vertebrae?

Select one:

a. C6, C7, T1

b. C3, C4, C5

c. C5, C6, C7, T1

d. C2, C3, C4

e. C4, C5, C6, C7

Question 52

Where are parathyroid glands NORMALLY present?

Select one:

- a. Upper chest under breastbone
- b. On top of kidneys
- c. Posterior surface of lateral lobes of thyroid
- d. Posterior to stomach
- e. In mediastinum

Question 53

Which one of the following is false about growth hormone?

Select one:

- a. Its growth-promoting effect is reduced in children with cretinism
- b. Raises IGF 1 levels in epiphyseal cartilage of long bones and in plasma
- c. Its secretion is normally enhanced by the hyperglycemia during glucose tolerance test
- d. Is indicated to stimulate growth in pituitary dwarfs due to defective GHRH secretion
- e. Is misused by athletes to enhance muscle development and exercise tolerance

Question 54

ACTH: Which of the following is false?

Select one:

- a. Can slow recovery of adrenal cortex after cessation of prolonged corticosteroid therapy
- b. Its biological trophic activity requires the first 24-amino acid sequence
- c. Its prolonged use can cause virilism due to hyperandrogenism
- d. Causes pigmentation of skin and mucous membrane with prolonged high plasma level
- e. Does not significantly increase cortisol plasma level if given i.v. in patients with Addison's disease

Question 55

A 40 years old pregnant woman has a sugar craving, Her serum glucose increases which cause release of insulin which is known

to increase the activity of acetyl CoA carboxylase, the rate limiting step in fatty acid biosynthesis. Which of the following best

describes this regulatory enzyme?

Select one:

- a. It catalyzes a reaction that requires biotin and ATP
- b. It is activated by malonyl CoA
- c. It catalyzes a reaction that condenses acetyl group with malonyl group
- d. It is activated by carboxylation
- e. It converts malonyl CoA to acetyl CoA

Question 56

Loss of which of the following pituitary hormones might be expected to increase responses to painful stimuli?

Select one:

- a. Growth hormone

b.  $\beta$ -Endorphin

c. ACTH

d.  $\beta$ -MSH

e.  $\alpha$ -Melanocyte stimulating hormone ( $\alpha$ -MSH)

Question 57

Which of the following is not true about gluconeogenesis?

Select one:

a. Two different sources of energy are utilized to convert pyruvate to phosphoenol pyruvate

b. It is inhibited by increased ATP/ADP, Acetyl CoA/CoA and glucagon/insulin ratios

c. For starting materials, it can use the carbon skeletons from most amino acids

d. It is one of the ways that the liver maintains glucose homeostasis

e. It is inhibited by the regulator fructose 2,6-bisphosphate

Question 58

Renin is secreted by?

Select one:

a. Granular cells in the juxtaglomerular apparatus

b. Cells in the proximal tubules

c. Cells in the distal tubules

d. Cells in the peritubular capillary bed

e. Cells in the macula densa

Question 59

A young woman has puffy skin, decreased BMR, Sleepiness and a hoarse voice. Her plasma TSH concentration is low but

increases markedly when she is given TRH. She probably has?

Select one:

a. Hypothyroidism due to a primary abnormality in the pituitary gland

b. Hyperthyroidism due to a primary abnormality in the hypothalamus

c. Hypothyroidism due to a primary abnormality in the hypothalamus

d. Hyperthyroidism due to a thyroid tumor

e. Hypothyroidism due to a primary abnormality in the thyroid gland

Answer: C

Question 60

Which of the following statements about glucose metabolism is correct?

Select one:

a. Fructose cannot be used for gluconeogenesis in the liver

b. Red blood cells can only metabolise glucose by anaerobic glycolysis and the pentose phosphate pathway.

c. All of the reactions of glycolysis are freely reversible for gluconeogenesis

d. Glycolysis can proceed in the absence of oxygen only if pyruvate is formed from lactate in muscle

e. Red blood cells can catalyse aerobic glycolysis because they contain oxygen bound to haemoglobin

Question 61

Epinephrine hormone causes glucose mobilization for energy and muscle contraction through, choose the wrong statement?

Select one:

- a. Inhibition of glycogen phosphorylase
- b. Increases cAMP levels
- c. Prevent the synthesis of glycogen through phosphorylation of glycogen synthase
- d. Activation of protein kinase A
- e. Binding to its G protein-linked receptor

Question 62

The following are true about the thyroid hormone?

Select one:

- a. T4 and T3 bind to the receptors in nuclei
- b. A greater proportion of tri-iodothyronine is formed when iodine is deficient
- c. Thyroid hormones decrease the number of B-receptors in myocardium
- d. Iodide ions enter the follicle cells by passive diffusion
- e. Thyroxine increases cholesterol

Question 63

True statements about aldosterone include?

Select one:

- a. It decreases the acidity of urine
- b. It increases the sodium content of the sweat
- c. It increases the amount of Na<sup>+</sup>-K<sup>+</sup> ATPase in the target cells
- d. It decreases the potassium content of urine
- e. The basal secretion is decreased even after hypophysectomy

Question 64

All the following matching are incorrect except?

Select one:

- a. Addison disease: Elevation of corticosteroid
- b. Nelson's Syndrome: Corticotroph cell adenoma
- c. Diabetes insipidus: Hyponatremia
- d. Most common pituitary adenoma: prolactin and growth hormones secreting adenoma
- e. Papillary thyroid carcinoma: Elevation of calcitonin

Q:65

Fructose malabsorption occurs due to impairment in?

Select one:

- a. GLUT3
- b. GLUT2
- c. GLUT8
- d. GLUT5
- e. GLUT4

Q:66

All the following anti-diabetics drugs act by the same mechanism Except?

Select one:

- a. Tolbutamide
- b. Repaglinide
- c. Chlorpropamide
- d. Gliclazide
- e. Metformin

Question 67

Steroids are?

Select one:

- a. They are synthesized from epinephrine and involved in the synthesis and transmission of peptides, proteins and neurotransmitters
- b. A type of cell membrane which is impenetrable but moveable
- c. They are synthesized from cholesterol and play role in sexual development
- d. A type of exocrine cell responsible for producing sweat
- e. They are short and long chains of amino acids which facilitate physiological, biochemical and growth processes

Q:68

One of the following is incorrect about diabetes type II Pathogenesis?

Select one:

- a. Excess free fatty acids compromise beta cell function
- b. It involves interactions of genetics and environmental risk factors
- c. Either Beta cell dysfunction or insulin resistance can lead to diabetes mellitus alone
- d. Visceral fat is more likely to be associated with diabetes than peripheral fat
- e. Adiponectin decrease blood glucose by increasing the insulin sensitivity

Question 69

What is the etiology of Graves' disease?

Select one:

- a. Type (I) Hypersensitivity reaction
- b. Viral infection of thyroid gland
- c. Autoimmune disorder
- d. Benign tumor of thyroid gland

e. Increase secretion of TSH hormone from pituitary gland

Question70

Which of the following statements is false about gluconeogenesis?

Select one:

- a. From the hydrolysis of fat, glycerol can be used as carbon source
- b. From red blood cells, lactate can be used as a carbon source
- c. The carbon skeletons of most amino acids can be used as a carbon source
- d. From muscle vigorous muscle activity, lactate can be used as a carbon source
- e. From the hydrolysis of fat, fatty acids can be used as a carbon source

Q:71

In de novo synthesis of fatty acids, each turn of the reactions add 2 carbon atoms. Which of the following is the compound that supply the 2 carbon atoms?

Select one:

- a. Propionyl CoA
- b. Succinyl CoA
- c. Acetyl CoA
- d. Malonyl CoA
- e. Keto acyl CoA

Q:72

Colloid is a substance associated with which of the following endocrine organs?

Select one:

- a. Pineal gland
- b. Thyroid gland
- c. Suprarenal glands
- d. Pars intermedia of human
- e. Parathyroid gland

Question 73

All following are types of glucocorticoids EXCEPT?

Select one:

- a. Methylprednisolone
- b. Prednisone
- c. Esomeprazole
- d. Dexamethasone
- e. Betamethasone

Question 74

All following about adrenocorticosteroids are true EXCEPT?

Select one:

- a. Principal human glucocorticoid is Hydrocortisone (cortisol)
- b. Hydrocortisone is short acting

Flag question

- c. They vary in their anti-inflammatory potency
- d. Betamethasone is long acting
- e. Triamcinolone can be given during pregnancy

Question 75

All of the followings are examples of effector proteins except?

Select one:

- a. Inositol trisphosphate
- b. Phospholipases
- c. Adenylyl cyclases
- d. Calcium ion channels
- e. Phosphodiesterases

Question 76

The following are true about aldosterone, except?

Select one:

- a. It is secreted by the adrenal medulla
- b. Its secretion is stimulated by decreased blood volume
- c. Abnormal secretion occurs in Conn's syndrome
- d. It stimulates active reabsorption of sodium in the distal renal tubules
- e. It causes increased secretion of potassium by the distal renal tubules

Question 77

One of the following sets of enzymes can be used as tumor markers for the diagnosis and monitoring the response to the treatment of the liver cell carcinoma and urinary bladder cancer?

Select one:

- a. Leucine amino peptidase and  $\beta$ -glucuronidase
- b.  $\beta$ -glucuronidase and amylase
- c. Alkaline phosphatase and neuron specific Enolase
- d. Lactate dehydrogenase and acid phosphatase
- e. Alkaline phosphatase and acid phosphatase

Question 78

The pancreas related to these veins except? غير مطلوب

Select one:

- a. Inferior pancreaticoduodenal vein
- b. IVC
- c. Superior mesenteric vein
- d. Renal veins
- e. Gonadal veins

Question 79

The following are true about the antidiuretic hormone?

Select one:

- a. It increases the renal absorption of sodium
- b. It increases the peripheral resistance**
- c. It is produced by the anterior pituitary gland
- d. It reduces the cardiac output
- e. It decreases the release of ACTH

Question 80

Anti-diuretic hormone(ADH)?

Select one:

- a. Its secretion is increased by a low plasma osmolarity
- b. Increases the permeability of the distal convoluted tubule
- c. Is released by neurosecretion**
- d. Is synthesized by the posterior lobe of the pituitary gland
- e. Its secretion is decreased in early post-operative period

The End