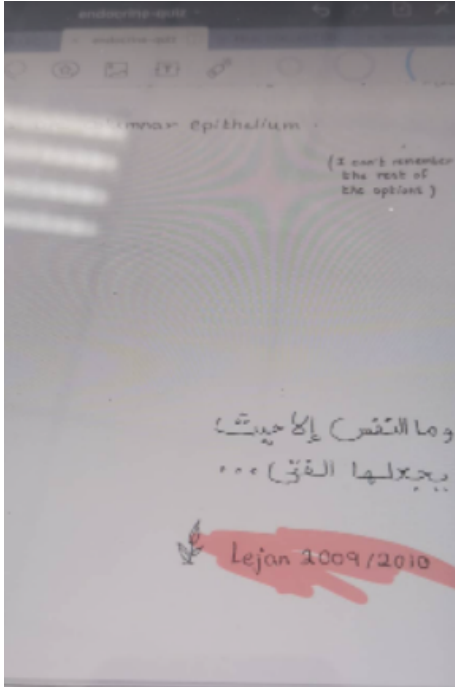


endocrine test bank for anatomy&physio & embryo & for med
done by MUHAMMAD ALJAHALIN

special thanks for ahmed allimon ,hiba mahdi , samia sami , noor adnan , haitham alsifi AND FOR LEJAN
2009



سهرى لتنقيح العلوم ألد لي
من وصل غانية وطيب عناق
وتمايلي طربا لحل عويصة
أشهى وأحلى من مدامة ساق
وصرير أقلامى على أوراقها
أحلى من الدوكاء والعشاق
وألد من نقر الفتاة لدفاها
نقري لالقي الرمل عن أوراقى
أأبيت سهران الدجى وتبيته
نوما وتبغى بعد ذاك لحاقى

31 pages , 6906 word , 197 questions

1. One of the followings is NOT TRUE about the endocrine system:

- a. A single endocrine gland may produce more than one hormone
- b. A single hormone may be secreted by more than one endocrine gland
- c. A single hormone has always one specific target cell the
- d. Same chemical substance may be either a hormone or neurotransmitter
- e. Some organs of the endocrine system perform non endocrine function

Answer c

2. Which of the following hormones does NOT work mainly via cyclic adenosine monophosphate as a second messenger

- a. Insulin
- b. ACTH
- c. Adrenalin
- d. Glucagon
- e. TSH

Answer A

3. Which one of the following is the MOST important hyperglycemic hormone?

- a. Growth
- b. Cortisol
- c. Glucagon
- d. Adrenaline
- e. Thyroxine

Answer c

4. Choose the incorrect answer regards Vitamin D:

- a. Increases the intestinal absorption of calcium
- b. Is essential for normal calcification in childhood
- c. Requires hepatic modification for activation
- d. The formation of (D3) structure is sufficient for the Human.
- e. Deficiency May Result In Hyperparathyroidism

Answer d

5. Which of the following hormones is the most essential to life

- a. Thyroid Hormone
- b. Aldosterone
- c. Calcitonin
- d. Epinephrine
- e. Vasopressin

Answer B

6. Cholesterol gives rise to all of the following EXCEPT

- a. Aldosterone
- b. Catecholamines
- c. Estrogen
- d. Progesterone
- e. Testosterone

Answer b

7. Which of the following hormones is least important in Ca⁺⁺ metabolism

- a. PTH
- b. Aldosterone
- c. 1,25- Dihydroxycholecalciferol
- d. GH
- e. Insulin

Answer b

8. Which one of the following hormones is hypoglycemic

- a. Growth Hormone
- b. Glucagon
- c. Epinephrine
- d. Insulin
- e. Cortisol

Answer d

9. Which of the following is a neurohormone ?

- a. Vasopressin(ADH)
- b. Thyroid
- c. Growth hormone
- d. Cortisol
- e. Luteinizing Hormone

Answer A

10. Which one of the following about osteoporosis is NOT TRUE:

- a. The most common of all bone diseases in adults specially in old age
- b. Occurs In Females Only
- c. It results from diminished organic matrix rather than abnormal bone calcification
- d. Lack of physical stress on the bone because of inactivity is one of the causes of osteoporosis
- e. It is different disease from osteomalacia

Answer b

11. In ONE of the following conditions growth hormone & insulin secretion is increased

- a. Protein Intake
- b. Carbohydrate Intake
- c. Fasting
- d. Obesity
- e. Aging

Answer A

12. Inhibition the production of one of the following will lead to hypotension (if severe enough, fatal):

- a. Insulin
- b. Thyroxin
- c. Angiotensin II
- d. Cortisol
- e. ACTH

Answer C

13. which of the following tissues does insulin DOES NOT facilitate glucose uptake

- a. Cardiac Muscle
- b. Smooth Muscle
- c. Leucocytes (WBCS)
- d. Erythrocytes (RBCs)
- e. Pituitary

Answer d

14. Dwarfism & mental retardation may be the result of a deficiency of :

- a. Growth hormone releasing hormone
- b. GH
- c. Somatomedins
- d. Thyroid Hormones
- e. Adrenalin Hormone

Answer d

15. All the following stimulate GH secretion EXCEPT

- a. Obesity
- b. Decrease blood glucose
- c. Decrease blood-free fatty acids
- d. Fasting

e. Exercise

Answer a

16. Circulating adrenaline: Choose the INCORRECT answer:

- a. Is a peptide hormone
- b. Tends to raise blood glucose levels
- c. Stimulates glucagon secretion
- d. Can Cause Vasoconstriction
- e. Is more likely to directly increase the heart rate

Answer a

17. Which of the following hormones is very important during the early development of the nervous system

- a. Growth Hormone
- b. Thyroid Hormone
- c. Cortisol
- d. Parathyroid Hormone
- e. Insulin

Answer b

18. The most abundant product secreted from the thyroid gland is _____ most potent thyroid secretory product is _____

- a. T₄, T₄
- b. T₃, T₄
- c. T₄, T₃
- d. T₄, MIT
- e. DIT, T₃

Answer c

19. Which of the following hormones does not work mainly via cAMP as a second messenger:

- a. Insulin.
- b. ACTH.
- c. Adrenalin.
- d. Glucagon.
- e. TSH.

Answer A

19. True about hormone mechanisms:

- a. All Steroid Hormones Bound To Cytoplasmic Receptors.
- b. Some steroid hormones are bound to cell surface receptors.
- c. Protein Hormones Can Cross The Cell Membrane.

Answer b

20. Hormone that is synthesized in endocrine cells and released to the interstitial space binds to a specific receptor of the nearby cell, this hormone is:

- a. Neurohormone
- b. Paracrine

c. Neurotransmitter

Answer B

21. Which of the following is NOT a hypothalamic function?

- a. Control Of Anterior Pituitary Hormone Secretion.
- b. Control of sleep and wakefulness.
- c. Regulation Of Body Water And Urine Osmolality.
- d. Regulation of core body temperature.
- e. Regulation Of Feeding.

Answer b (memorize)

22. With reference to pituitary function Which one of the following is NOT true?

- a. Adrenocorticotrophic hormone secretion is inhibited by a rise in blood cortisol.
- b. Growth hormone is secreted only before adulthood.
- c. The hypothalamus secretes both growth hormone releasing factor and growth hormone-inhibiting factor.
- d. Oxytocin migrates in neurons from hypothalamus to posterior pituitary.
- e. Storage of anti-diuretic hormone is in the pituitary.

Answer b

23. True about hypothalamic hormones:

- a. ADH is produced by hypothalamus stored in anterior pituitary gland.
- b. Hypothalamus produces both FSH & LH.
- c. All hypothalamic hormones stimulate anterior pituitary gland hormones.
- d. GHRH Stimulate (FSH) & (LH) release from anterior pituitary
- e. All hypothalamic hormones are either peptides or Catecholamines.

Answer E

24. Which part of the brain controls thirst and urine output, food intake, and body temperature among other things?

- a. Basal nuclei.
- b. Brain stem.
- c. Cerebral cortex.
- d. Hypothalamus.
- e. Thalamus.

Answer D

25. The hypothalamic-pituitary portal system is important in the regulation of all of the following hormones EXCEPT for

- a. GH.
- b. ACTH.
- c. Vasopressin.
- d. Prolactin.
- e. TSH.

Answer C

26. Which of the following characterizes type I but not type II diabetes mellitus

- a. Hyperglycemia.
- b. Lack of insulin.
- c. Polyuria Polydipsia.
- d. Can usually be successfully managed by dietary control & weight reduction without the necessity of insulin injections.
- e. Lack Of Insulin Necessary.

answer B

27. The hormone that, in general is antagonistic to all the others in terms of metabolic effects is

- a. Growth Hormone.
- b. Glucagon.
- c. Epinephrine.
- d. Insulin.
- e. Cortisol.

Answer D

28. Which one of the following about anti-diuretic hormone (ADH) is NOT true:

- a. It Is Synthesized In Neurons.
- b. It is carried to the pituitary gland via capillaries.
- c. Its Release Into The Blood Is From The Posterior Pituitary.
- d. Lack of ADH causes diabetes insipidus.
- e. ADH acts on the kidney tubules.

Answer b

29. Which of the following probably triggers the onset of labor?

- a. ACTH in fetus.
- b. ACTH in the mother.
- c. Prostaglandins.
- d. Oxytocin.
- e. Placental renin.

Answer D

30. Which one of the following is not secreted by pituitary gland?

- a. Prolactin.
- b. Oxytocin.
- c. G.H.
- d. Somatomedin.
- e. L.H.

Answer d

31.- All of the following are true about GH except:

- a. Gigantism Is Related To Overproduction Of Growth Hormone.
- b. Another term for Growth hormone is somatotropin.
- c. GH and insulin function synergistically.

- d. GH decrease glucose uptake by muscle cells.
- e. Somatostatin stimulate GH release.

Answer E

32.- All of the following are true about GH except:

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- a. Gigantism Is Related To Overproduction Of Growth Hormone.
- b. Another term for Growth hormone is somatotropin.
- c. GH and insulin functions synergistically.
- d. GH decrease glucose uptake by muscle cells.
- e. Somatostatin stimulate GH release.

Answer E

33. is the part of the brain that controls the anterior pituitary gland secretions

- a. Pineal Gland.
- b. Thalamus.
- c. Hypothalamus.
- d. Medulla oblongata.
- e. Corpus Callosum.

Answer c

34.If you were to eat four sugar glaze doughnuts and a large soft drink (like Pepsi), which hormone would you expect to be secreted at higher levels:

- a. Cortisol.
- b. Epinephrine.
- c. Glucagon.
- d. Insulin.
- e. Oxytocin.

Answer D

35.An increase in plasma levels of ACTH leads to?

- a. Increased glucagon levels.
- b. Increased plasma cortisol levels.
- c. Increased plasma epinephrine levels.
- d. Increased plasma parathyroid hormone levels.
- e. Increased plasma vasopressin levels.

Answer B

36.Physiological cut of the pituitary stalk (infundibulum) that connects hypothalamus to pituitary gland will show an increase in which of the following hormones?

- a. Thyroid Stimulating Hormone.
- b. Prolactin.
- c. Oxytocin and ADH.
- d. Growth hormone.
- e. Cortisol.

Answer B

37. ACTH is the major regulator for secretion of which of the following from the adrenal glands?

- a. Epinephrine And Norepinephrine
- b. Cortisol.
- c. Androgens(dihydroepiandrosterone-DHEA). d. Aldosterone.
- e. All of the above are correct.

Answer b

38. Series of photographs taken of a middle-aged man over a period of 20 years demonstrates gradual coarsening of facial features and progressive protrusion of the brows. Upon questioning, the patient reports having to wear larger shoes than he did as a young man. Which of the following pair of hormones regulates the hormone responsible for these changes?

- a. Thyroid stimulating hormone (TSH) and adrenocorticotrophic hormone (ACTH).
- b. Somatostatin and growth hormone releasing hormone (GHRH).
- c. Prolactin And Follicle Stimulating Hormone(FSH).
- d. Luteinizing hormone (LH) and human chorionic gonadotropin (hCG).
- e. Dopamine And Norepinephrine.

Answer B

39. The supraoptic and paraventricular nuclei of the hypothalamus control the secretion of which of the following hormones to the posterior pituitary?

- a. Oxytocin and prolactin.
- b. Growth hormone and prolactin.
- c. Follicle stimulating hormone and luteinizing hormone.
- d. Antidiuretic hormone and oxytocin. **والثنين** single peptide 9 A.A
- e. Adreno Cortico Tropic Hormone And Oxytocin.

Answer d

40. Hypopituitarism that involves all its hormone is characterized by

- a. Weight Gain.
- b. Intolerance to heat.
- c. Infertility.
- d. High levels of cortisol.
- e. Excessive Growth Of The Soft Tissue.

Answer C

41. The following statements about Oxytocin is INCORRECT:

- a. It is important in parturition by stimulating uterine contractions.
- b. It is involved in a positive feedback cycle during parturition.
- c. It is secreted by the neurohypophysis.
- d. It stimulates synthesis of milk by glands.
- e. Suckling stimulates its secretion.

Answer D

42. The hypothalamus inhibits the release of

- a. ACTH.
- b. FSH.
- c. GH.
- d. Prolactin.
- e. TSH.

Answer D

43.Synaptic vesicles store

- a. Glycogen For Energy Production.
- b. Oxygen.
- c. Neurotransmitter.
- d. Calcium ions.
- e. Enzymes For Degrading Neurotransmitter.

Answer C

44.Which type of hormonal interactions is the effect of thyroxine and adrenaline on fat cells?

- a. Permissive Effect.
- b. Synergistic Effect.
- c. Antagonistic Effect.
- d. A and B.
- e. AandC.

Answer A

Remember (GH and Insulin :synergistically,
 from costanzo :Thyroid hormones act synergistically with growth hormone and somatomedins to promote bone formation
 Cortisol & glucagon Permissive in glucocorticoidogenesis)

45.The release of somatostatin from islet delta cell & its subsequent action on nearby alpha & beta cells in the same pancreatic islet, this is an example of

- a. Autocrine Types Of Hormone Action.
- b. Exocrine types of hormone action.
- c. Neuroendocrine Types Of Hormone Action. d. Paracrine types of hormone action.
- e. Endocrine Types Of Hormone Action.

Answer D

46.Which of the following does NOT stimulate insulin secretion?

- a. Elevated Blood Amino Acid Concentration.
- b. Gastrointestinal hormones.
- c. Big Sandwich.
- d. Starvation.
- e. Elevated Blood Glucose Concentration.

Answer D

47.Most hormones of the body are classified structurally as:

- a. steroids.

- b. Amines.
- c. Carbohydrates.
- d. Peptides and proteins.
- e. Lipids.

Answer d

48.Hormone receptors:

- a. Respond To A Particular Peptide Hormone Only.
- b. Tend to increase in number in response to an increased presence of hormone molecules that bind to them.
- c. Are found in the plasmamembranes of cells and the nuclei of other cells depend on the nature of the **hormone**.
- d. Are found in the plasma membranes of cells that respond to steroid hormones.
- e. None of the above.

Answer C

49.Which of the following secrete hormones

- a. Hypothalamus.
- b. Testes.
- c. Kidneys.
- d. Stomach and intestine. e. All of the above.

Answer E

50.Cortisol is an example of:

- a. Adenylate Cyclase Mechanism(CAMP)of hormone action.
- b. Guanylate cyclase mechanism (CGMP) of hormone action. Phospholipase C mechanism (IP3/Ca++) of hormone action.
- c. Steroid Hormone Mechanism Of Hormone Action.
- d. Tyrosine kinase mechanism of hormone action.

Answer C

51.All of the following produce hormones EXCEPT:

- a. Posterior Pituitary
- b. Stomach
- c. Liver
- d. Thyroid

Answer a

52.Which hormone of the following is the hormone made by liver:

- a. Ghrelin
- b. Somatomedin c. GH

Answer B

53.Affected in all hypopituitary disorders:

- a.
- b. Prolactin

c. GH

Answer A

54.Excess GH secretion, what is wrong?

- a. Muscle Increases Glucose Uptake
- b. Atrophy of pancreatic beta cells

Answer A

55.Which one of the following enhances GH?

- a. Aging
- b. Obesity
- c. Fasting

Answer C

56.Wrong about mechanism of action of hormone:

- a. protein hormones can not penetrate cell membranes and their receptors are found on the cell's surface.
- b. Protein hormones activate the G-protein in the cell membrane.
- c. Amino Acid derivatives hormones are lipid soluble and they can penetrate cell membrane as well as nuclear membrane.
- d. All steroid hormones always bind receptors inside the cell of the nucleus.

Answer D

57.True about G protein:

- a. G-protein is composed of 3 subunits alpha,beta and delta.
- b. the active part of G-protein is the beta subunit; which separates from the G protein when it is activated.
- c. Relays on a signal from the first messenger/receptor complex to a membrane protein to activate processes

Answer C

58.True about desensitization:

- a. it happens directly when the cells are exposed to a certain hormone for a short duration.
- b. heterologous desensitization is characterized by loss of responsiveness only to the particular ligand and maintained responsiveness of the cell to other ligands; and homologous desensitization, in which the cell becomes unresponsive to other ligands as well.
- c. desensitization is another term for upregulation.
- d. An example on desensitization is type I Diabetes Mellitus.
- e. noneoftheabove.

Answer e

59.A lot of hormones contribute in growth, choose the major growth hormones pair that determines growth of post uterine life:

- a. Insulin,GH
- b. Thyroid hormone, insulin
- c. GH,IGF-1

d. Estrogen, androgen

Answer c

60. Hormone that binds cytoplasmic receptor:

- a. Calcitonin
- b. Insulin
- c. Glucagon
- d. Progesterone

Answer d

61. What is the second messenger of oxytocin & TRH?

- a. IP3.
- b. cAMP.
- c. cGMP.

Answer A

62. Patient with cardiomegaly and other things, the abnormal hormone is:

- a. GH
- b. Prolactin
- c. ADH
- d. Oxytocin
- e. TSH

Answer A

63. Acromegaly and gigantism are due to?

- a. Insulin Deficiency
- b. ACTH overproduction
- c. ACTH deficiency
- d. GH overproduction
- e. GH deficiency

Answer D

64. Find the odd hormone:

- a. Growth Hormone.
- B.. prolactin.
- c. Somatostatin.
- d. Cortisol.
- e. Calcitonin.

Answer d

65. In Comparison of cortisol and aldosterone, which of the following NOT True:

- a. Cortisol has mineralocorticoid activity.
- b. Aldosterone has some glucocorticoid activity.
- c. The rate of secretion of aldosterone is higher than cortisol.

Ans c

66. Which one of the following about Aldosterone is NOT true:

- a. Assists in compensation for depletion of blood volume by hemorrhage.
- b. Is secreted by the zona glomerulosa of the adrenal cortex.
- c. It contributes in glucocorticoid activity.
- d. Output is principally dependent on adrenocorticotrophic hormone secretion.
- e. Promotes Renal Loss Of Potassium.

Answer d

67. Although the adrenal cortex secretes at least _____ different hormones, about 95% of the mineralocorticoid activity is due to _____.

- a. 3, Aldosterone.
- b. 2, Cortisol.
- c. 4, Gonadocorticoids.
- d. 5, Epinephrine.
- e. 7, Norepinephrine

Answer A

68. A tumor in the adrenal zona glomerulosa can cause hypersecretion of hormones produced in that region. Which of the following might you expect to find in a patient with such a tumor?

- a. Decreased blood calcium levels.
- b. Increased blood glucose levels.
- c. Increased blood sodium levels.
- d. Increased Dehydration.
- e. Increased Ketoacidosis

Answer c

69. ACTH is the major regulator for secretion of which of the following from the adrenal glands?

- a. Epinephrine and norepinephrine.
- b. Cortisol.
- c. Androgens (dihydroepiandrosterone-DHEA).
- d. Aldosterone.
- e. All of the above are correct.

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Answer b

70. Adrenal cortical hormones essential for sodium and potassium regulation is?

- a. Progesterone.
- b. Epinephrine and norepinephrine.
- c. Cortisol
- d. Androgens.
- e. Aldosterone.

Answer E

71. Which of the following statements concerning adrenocortical hormones is INCORRECT?

- a. Mineralocorticoids are essential for life.
- b. They all combine with intracellular receptors.
- c. They are all controlled primarily by ACTH.
- d. They are all derived from cholesterol.
- e. They are all steroids.

Answer c

73.The most important hormone in keeping normal K⁺ concentration in the body:

- a. Cortisol.
- b. Vasopressin.
- c. Insulin.
- d. Aldosterone.

Answer d

74.Wrong about ACTH:

- a. Secreted when the median eminence is stimulated.
- b. Its secretion is affected by aldosterone.
- c. Is a Polypeptide
- d. Increases The Release Of Cortisol.

Answer b

75.which of the following doesn't stimulate ALDOSTERONE:

- a. Potassium
- b. ACTH
- c. Sodium
- d. Renin

Answer c

76. Cortisol has permissive effect with glucagon in:

- a. Gluconeogenesis.
- b. Glycogenolysis.
- c. Lipolysis.
- d. Vasoconstriction

Answer A

77.Which hormone lead to hypertension?

- a. Angiotensin 2.
- b. Insulin.
- c. Glucagon.
- d. Thyroid hormone.

Answer a

78.Which one of the following Inhibits ACTH release:

- a. Cortisol.
- b. Aldosterone.
- c. Insulin.
- d. Thyroid hormone.

Answer a

79.Wrong about angiotensin II?

- a. A maximal amount of aldosterone is needed for fluid balance.
- b. Is the main stimulus of aldosterone.
- c. Angiotensin I produces angiotensin II under the effect of enzyme/ hormone from the lungs.
- d. Affects the reabsorption of sodium directly and indirectly.

Answer A

80.Wrong about direct cortisol functions:

- a. Glycogenolysis.
- b. Gluconeogenesis.

- c. Fat Mobilization.
- d. CNS function.

Answer A

Primary aldosterone stimulator:

- a. Angiotensin II.
- b. Changes in plasma potassium.
- c. ACTH.
- d. TSH.

Answer A

81. Main site of action for aldosterone?

- a. Proximal tubule.
- b. Distal tubule.
- c. Collecting tubules.
- d. Loop of Henle.

Answer c

82. All of the following apply to glucocorticoid except:

- a. Antidiuretic Effect.
- b. Gluconeogenesis.
- c. Support vascular response.
- d. Fat mobilization.

Answer A

Separator line

83. A patient with parathyroid deficiency 10 days after thyroidectomy will show

- a. Increased muscular excitability, high plasma Ca and bone resorption.
- b. High plasma phosphate, high plasma Ca⁺⁺ and bone resorption.
- c. High plasma Ca⁺⁺, high level of active vitamin D and tetanus.
- d. A low plasma phosphate, high plasma Ca levels and tetanus.
- e. A low plasma Ca levels, increased muscular excitability.

Answer E

84. Which of the following is not involved in regulation of plasma Ca⁺⁺ levels

- a. Thyroid.
- b. Small intestine.
- c. Skin.
- d. Lungs.
- e. Kidneys.

Answer d

85. Which of the following statements concerning parathyroid hormone's (PTH) actions is INCORRECT?

- a. An elevated plasma calcium acts directly on the parathyroid gland to stimulate PTH secretion.
- b. PTH helps the kidneys excrete excess phosphate from the body.
- c. PTH promotes localized dissolution of bone by stimulating osteoclasts.
- d. PTH promotes the rapid movement of Ca from the bone fluid into the plasma.
- e. PTH stimulates the reabsorption of Ca from the kidney.

Answer a

86-Low blood glucose level typically results in the secretion of all of the following EXCEPT:

- a. Cortisol.
- b. Glucagon.
- c. Growth Hormone.
- d. PTH.
- e. Thyroxine(T4).

Answer d

87.Each of the following hormones is an amino acid derivative EXCEPT:

- a. Epinephrine.
- b. Melatonin.
- c. Norepinephrine.
- d. Thyroid stimulating hormone (TSH).
- e. Thyroxin(T4).

Answer d

88-Regarding the thyroid hormones;

- a. They decrease the basal metabolic rate.
- b. They are lipid soluble steroid hormones.
- c. T4 is four time more active than T3.
- d. In the serum most of the thyroid hormones are in the free form.
- e. After birth they stimulate development of the central nervous system

Answer e

89-Hyperthyroidism can be due to all of the following EXCEPT

- a. Lack of iodine.
- b. Thyroid-stimulating immunoglobulin.
- c. TOOmuchT4orT3.
- d. TOOmuchTRH.
- e. TOO much TSH.

Answer a

90.Which of the following hormones enhances the formation of the active form of vitamin D?

- a. Aldosterone.
- b. Calcitonin.
- c. Cortisol.
- d. Parathyroid Hormone.
- e. Thyroxine.

Answer d

91-Which one of the following about osteoporosis is not true:

- a. The most common of all bone diseases in adults specially in old age
- b. Occurs In Females Only.
- c. It results from diminished organic matrix rather than abnormal bone calcification.
- d. Lack of physical stress on the bone because of inactivity one of the causes of osteoporosis.
- e. It is a different disease from osteomalacia.

Answer b

92. Which one of the following factors is the most important in the production of 1,25 (OH)2-D from 25 (OH)D in the kidney:

- a. LowplasmaCa++level.

- b. Low Plasma Phosphate Level.
- c. PTH.
- d. Insulin.
- e. GH.

Answer C

93. Which of the following is INCORRECT concerning PTH, calcitonin & vitamin D?

- a. Vitamin D deficiency is the cause of rickets.
- b. PTH is the most important hormone in the control of calcium metabolism.
- c. Both calcitonin & PTH are produced in the follicle cells of the thyroid gland.
- d. Vitamin D is actually a hormone that increases calcium absorption in the intestine.
- e. Parathyroid hormone is essential for life.

Answer C

95. Calcitonin has which of the characteristics?

- a. It stimulates the action of osteoclasts.
- b. Its absence or its excess can be fatal.
- c. The blood iron level directly controls the secretion of calcitonin.
- d. It helps maintain the homeostasis of calcium & phosphate in the blood.
- e. It is produced by the parathyroid glands.

Answer D

96. Which of the following biochemical events does NOT take place within the thyroid gland during hormone synthesis?

- a. Four iodine molecules combine with one tyrosine molecule to form one tetraiodothyronine molecule.
- b. Two iodine molecules combine with one tyrosine molecule to form one diiodotyrosine molecule.
- c. Two diiodotyrosine molecules combine to form one molecule of thyroxine.
- d. One monoiodotyrosine molecule combines with one diiodotyrosine molecule to form one triiodothyronine molecule.
- e. Iodide recycling occurs within the thyroid follicular cell.

Answer A

97. Which of the following hormones is very important during early development of the nervous system?

- a. Growth Hormone.
- b. Thyroid Hormone.
- c. Cortisol.
- d. Parathyroid Hormone.
- e. None of the above are correct.

Answer B

98. Iodine is necessary for the formation of

- a. ACTH.
- b. Calcitonin.
- c. Cortisol.
- d. Insulin.
- e. Thyroid Hormone.

Answer e

99. Which one of the following about the T4 is FALSE:

- a. Is quantitatively the major precursor of T3.
- b. Is formed by condensation of 2 iodinated tyrosine.
- c. Binds directly to DNA in the nucleus of target cells.
- d. Is bound to protein in the plasma.
- e. Has one-week half-life.

Answer c

100. Which one of the following hormones is least important in bone formation and Ca metabolism:

- a. PTH.
- b. Aldosterone.
- c. 1,25 - dihydroxycholecalciferol.
- d. GH.
- e. Insulin.

Answer b

101. Which one of the following about T3 is NOT TRUE?

- a. Is converted into rT3 in some conditions.
- b. Is made up of two iodinated tyrosine molecules.
- c. Mainly produced from T4.
- d. The Most Active Hormone Of Thyroid Gland.
- e. Very little is produced from the thyroid gland.

Answer a

102. Which one of the following hormones most probably is least secreted during stressful conditions?

- a. Cortisol.
- b. Prolactin.
- c. G.H.
- d. Somatostatin.
- e. Thyroxine.

Answer e

103. The following hormones counteract the hypoglycemic effect of insulin EXCEPT:

- a. Thyroxine.
- b. Growth Hormone.
- c. Glucagon.
- d. Cortisol.
- e. Adrenaline.

Answer A

104. The hormone that aids in determining the Basal metabolic rate (BMR) is

- a. Estrogen.
- b. Thyroid Hormone.
- c. Insulin.
- d. Epinephrine.
- e. Testosterone.

Answer b

105. Dwarfism & mental retardation may be the result of a deficiency of

- a. Growth-hormone releasing hormone.
- b. GH.
- c. Somatomedins.
- d. Thyroid Hormones.

e. Adrenaline Hormone.

Answer d

106. Hormone that has receptor in almost all cells:

- a. Adrenocorticotropin.
- b. Thyroxin.
- c. Parathyroid.
- d. TSH.
- e. LH.

Answer b

107. One of the following hormones is not correctly linked to its actions: (x = effective, -- = not effective)

	Process → Hormone ↓	glycogenolysis	lipolysis	gluconeogenesis	Inhibition of Glu intake
a-	Glucagon	x	-	x	-
b-	GH	x	x	-	x
c-	Cortisol	x	x	-	x
d-	Thyroid H	x	-	-	x
e-	epinephrine	x	-	x	x

Picture 1

Answer d

108. One of these hormones when present in excessive amounts results in protein catabolism: -

- a. Insulin. b. GH.
- c. T3.
- d. IGF-1. e. PRL.

Answer c

109. Where is 1,25 (OH)D produced from:

- a. Liver.
- b. Kidney.
- c. Skin.
- d. Stomach

Answer b

110. Choose the wrong sentence:

- a. Ca, Mg And Phosphate Are Not Important.
- b. Vitamin D is the major regulator for Ca.
- c. Calcitonin decreases Ca blood level
- d. Alkalosis decreases free calcium levels.

Answer a

111. Which pair of the following hormones is the most potent activator of the synthesis of 1,24-(OH)₂ vit D₃.

- a. GH & PRL.
- b. GH & insulin.
- c. PRL & insulin.
- d. PTH, low P.
- e. PTH, low Ca +2.

Answer d

112. About Ca²⁺ metabolism, which one is Not True:

- a. PTH and vit D has synergistic effect.
- b. Calcitonin Reduces(Ca)Level.
- c. PTH and vit D has the same effect.

Answer c

113.-Which is false about the thyroid:

- a. Iodine deficiency doesn't cause goiter
- b. Thyroid hormones are amino acid derivatives.

Answer a

114. Which is false about T4:

- a. It acts more rapidly than T3.
- b. T4 has longer half-life than T3

Answer A

115-Which is true about thyroglobulin:

- a. Contains MIT & DIT.
- b. glycoprotein produced by the follicular cells of the parathyroid gland

Answer A

116-True about Thyroxin synthesis:

- a. Iodide (I⁻) is oxidized to Iodine (I₂)
- b. One tyrosine can carry 3 iodine molecules maximum.

Answer A

117-What happens to most of T4?

- a. Converted to T3
- b. Converted to reverse T3

Answer A

118- which of the following does not occur in thyroid hormone synthesis:

- a. 4 molecules of iodine bind to one molecule of tyrosine to form tetraiodothyronine
- b. When one MIT binds with DIT, they produce T3
- c. When two DIT bind with each other, they produce T4

Answer A

119-True about T3:

- a. promotes growth
- b. contains 2 iodine molecules

Answer A

120- Not a symptom of hyperparathyroidism

- a. tetany
- b. softening of the bones

121-Not made in the liver

- a. calcitonin
- b. 25(OH)D

Answer A

122. Wrong about Vit. D:

- a. making ergocalciferol is sufficient for humans
- b. 1,25(OH) D is the most potent form

Answer A

123-Wrong about calcitonin?

- a. Deficiency causes hypercalcemia but hypersecretion doesn't cause hypocalcemia
- b. Produced by thyroid

Answer A

124-Wrong about endocrine:

- a. anterior pituitary hormone directly inhibits parathyroid
- b. hypothalamus regulates anterior pituitary gland hormones

ANSWER A

Ssssssssss

No

125. All of the following regulate the excretion of K⁺ by the kidney EXCEPT ONE

- a. Aldosterone.
- b. ADH.
- c. Insulin.
- d. Acid-base balance.
- e. [Na⁺] of tubular fluid.

Answer c

126.Which of the following about the dehydration effects in insulin deficiency is NOT true:

- a. Osmotic pressure of tubular fluid increases.
- b. Cellular dehydration occurs.
- c. Both ECF and ICF dehydration develops.
- d. Osmotic diuresis occurs.
- e. Tubular reabsorption of fluid increases.

Answer E

127-Which of the following is NOT produced by the exocrine part of the pancreas?

- a. Amylase.
- b. Carboxypeptidase. c. Lipase.
- d. Somatostatin.
- e. Trypsinogen.

Answer d

128-Which of the following characterizes type I but not type II diabetes mellitus?

- a. Hyperglycemia.
- b. Lack of insulin.
- c. Polyuria & polydipsia.
- d. Can usually be successfully managed by dietary control & weight reduction without the necessity of insulin injections.
- e. Lack of insulin necessary.

Answer B

129-The renal threshold in diabetic patients is about:

- a. 120mg/100mlplasma.
- b. 150mg/100mlplasma.
- c. 180 mg/100 ml plasma.
- d. 220mg/100mlplasma.
- e. 250mg/100mlplasma.

Answer c

130-Which one of the following about obesity is TRUE:

- a. Obesity is the most common and most expensive nutritional problem in the industrialized world specifically in the U.S.A.
- b. A convenient and reliable indicator of body fat is the (PMI).
- c. (EMI) is the body weight (in Kg) divided by the square of the height (in meters).
- d. Values above 25 are abnormal, individuals with values of 25-30 are overweight, and those with values > 30 are obese.
- e. All Of The Above.

Answer e

131-Type-1 diabetes mellitus is different from type-2 in all of the following EXCEPT

- a. Plasma Insulin Level.
- b. Plasma Glucose Level.
- c. Insulin sensitivity.
- d. Age Of Onset.
- e. Bodyweight(normally).

Answer b

132-Regarding urine in a normal person in a regular diet, all the following are true EXCEPT:

- a. Contains glucose and protein.
- b. Contains Urea And Creatinine.
- c. Does not contain inulin.
- d. Is acidic.
- e. Is hyperosmolar.

Answer a

133-Which one of the following hormones is hypoglycemic

- a. Growth Hormone
- b. Glucagon.
- c. Epinephrine.
- d. Insulin.
- e. Cortisol.

Answer d

134-Which one of the following is the MOST important hyperglycemic hormone?

- a. Growth.
- b. Cortisol.
- c. Glucagon.
- d. Adrenaline.
- e. Thyroxine.

Answer c

136-Choose the Wrong pair:

- a. Epinephrine:increased glycogenolysis in skeletal.
- b. Progesterone:increased glucose in plasma.
- c. GH: increased glucose in plasma.
- d. Glucagon:increased gluconeogenesis.
- e. Insulin:increased protein synthesis.

Answer b

137-correct about insulin independent diabetes:

- a. Insulin is normal or above normal.
- b. Atrophy of beta cells of pancreas.
- c. Insulin is below normal level.

Answer a

138.Wrong about glucose homeostasis:

- a.The rates of secretion of cortisol and growth hormone are not usually coupled to the absorptive-post-absorptive pattern
- b.Glucagon and the sympathetic nervous system are activated during the post absorptive period
- c.Their presence in the blood at basal concentrations is necessary for normal adjustment of lipid and carbohydrate metabolism to the post absorptive period
- d.Excessive amounts of either hormone do not cause abnormally elevated plasma glucose concentrations
- e.Insulin secretion and plasma concentration are increased during the absorptive period and decreased during post-absorption

Answer d

139-Which of the following doesn't happen in patient with diabetes:

- a. Diabetic coma could be caused by dehydration.
- b. Increased Osmotic Diuresis.
- c. Increased tubular reabsorption.
- d. Increased ECF volume.
- e. Increased ECF and ICF volume.

Answer c

140-What is the action that needs the least amount of insulin hormone?

- a. Inhibiting Hepatic Gluconeogenesis.
- b. Lipolysis inhibition.
- c. Stimulation of amino acid uptake.

Answer A%

141-Wrong about type 2 diabetes mellitus

- a. Not limited to obesity and the limited cause.
- b. Treatment being similar to DM1.

Answer b

142-Constant glucose level to?

- a. Brain.
- b. Liver.
- c. Muscles.

Answer a

143-True about insulin

- a. Requirement Increases In Obesity.
- b. It is a polypeptide containing 4 peptide chains.
- c. It is a hyperglycemic hormone.

Answer a

144-True about DM?

- a. Type 2 are usually obese and have a family history of the disease.
- b. Type 1 is insulin independent.
- c. Blood glucose is decreased in type 1 while it is increased in type 2.

Answer a

145-Wrong about DM?

- a. Type 2 Has Peripheral Resistance Which Involves.
- b. Decreased glucose uptake by skeletal muscles and brain tissue.
- c. Type 1 usually affects children

Answer b

- c. Vasopressin.
- d. ADH.
- e. Cortisol.

Answer A

154-In which of the following thyroid abnormalities goiter DOES NOT occur:

- a. Hypothyroidism due to lack of iodine.
- b. Hyperthyroidism due to TSI.
- c. Hypothyroidism due to primary failure of thyroid gland.
- d. Hyperthyroidism due to hypersecreting thyroid tumor.
- e. Hyperthyroidism secondary to excess hypothalamic secretion.

Answer d

155.Which one of the following about glucose homeostasis is not true?

- a. The rates of secretion of cortisol and growth hormone are not usually coupled to the absorptive-post-absorptive pattern
- b. Glucagon and the sympathetic nervous system are activated during the post absorptive period
- c. Their presence in the blood at basal concentrations is necessary for normal adjustment of lipid and carbohydrate metabolism to the post absorptive period
- d. Excessive amounts of either hormone do not cause abnormally elevated plasma glucose concentrations
- e. Insulin secretion and plasma concentration are increased during the absorptive period and decreased during post-absorption

Answer d

156-Which one of the following about amylin and insulin hormones is not true?

- a. Patients with type I diabetes have a deficiency of insulin with a normal level of amylin
- b. They are co-packaged in the same granules
- c. Amylin hormone complements the actions of insulin in post prandial glucose homeostasis via several mechanisms
- d. Plasma concentrations of the two hormones display a similar diurnal pattern of low fasting levels and high levels in response to meals
- e. Consequently, amylin is normally co-secreted with insulin

Answer A

160.Hormone increases efferent arteriole resistance and increase GFR?

- a. ANG II
- b. ANG I
- c. OXYTOCIN

Answer: ANG II

162.Which of the following doesn't happen in case of excessive aldosterone?

- a. dyhydration and acidosis
- b. **lower potassium levels**
- c. increase Na⁺ levels

Answer: dehydration and acidosis

163. Which of the following is not a physiological regulator for aldosterone?

Answer: ANG I

In a patient with lack of ADH, which segment is the most diluted?

- a) Thin descending
- b) Thin ascending
- c) Thick ascending
- d) Late distal + Cortical collecting

answer D

164) Which of the following not secreted from kidney ?

- A) Renin
- B) Erythropoietin
- C) ADH
- D) Colchicine

answer C

165. what is the hormone that decreases insulin secretion

- a. leptin
- b. gh
- c. cortisol

answer A

166. Which of the following is incorrect regarding Vitamin D?

Answer: D2, D3 they have the same efficiency

Which of the following does not use cAMP as a second messenger?

- a. ACTH
- b. MSH
- c. GLUCAGON
- d. insulin

Answer: insulin & oxytocin (both are correct)

167. estrogen hormone does not contribute with the gh in the protein synthesis

Severe uncontrolled diabetes mellitus leads to : Choose the incorrect answer

- a. decrease in pH.
- b. increase plasma K⁺ concentration.
- c. increase Blood volume.
- d. increase osmotic diuresis of urine

e. increase amino acids.

answer B (in the diabetic, **amino acid catabolism is exaggerated in the fasting state** as reflected by increased uptake of alanine by the liver for gluconeogenesis and accelerated branched-chain amino acid catabolism in muscle.

bssssss brdo

uptake of branched chain amino acids by muscle is reduced and these amino acids accumulate in increased amounts in arterial blood)

168. The activity of the adrenal zona glomerulosa is stimulated mainly by:

- a. Cortisol.
- b. Hypernatremia.
- c. Hypokalemia.
- d. Angiotensin II.
- e. Atrial natriuretic peptide.

answer D

169. Triiodothyronine (T3): choose the correct answer

- a. Binds to plasma membrane receptors
- b. Is all protein bound in the circulation
- c. Promotes Growth.
- d. Is the only biologically active form of thyroid hormone
- e. 90% is formed from thyroxine (T4)

answer C

170. Which one of the following about the mechanism of action of hormones is true?

- a. Some hormones of steroid types bind with receptors in the cell membrane in certain conditions.
- b. Most of the protein hormones have Diacylglycerol and IP3 as a second messengers.
- c. All amino acids derivatives hormones bind with receptors inside the cells or nucleus.
- d. Once the hormone binds with the receptors for sure it continues to proceed functioning.
- e. All steroid hormones bind always with receptors in the cells or nucleus.

answer A

171. PTH has which of the following primary actions ?

- a. It decreases renal tubular calcium reabsorption.
- b. It increases bone resorption.
- c. It increases gastrointestinal calcium absorption.
- d. It increases 24,25-(OH)₂-vitamin D synthesis.
- e. It decreases urinary phosphate excretion.

answer B

172. Antidiuretic hormone: Choose the correct answer:

- a. Is produced by posterior pituitary gland cells
- b. Increases the permeability of the cells in the 100p of Henle to water
- c. Secretion is little affected by changes in plasma osmolality of less than 10%

- d. Secretion increases when plasma volume falls but osmolality is unchanged
- e. Causes the osmolality of the plasma to rise

answer C

173. The increased levels of one choice of the following hormones accompany the maternal morning sickness:

- a. Progesterone and estrogen
- b. Human placental lactogens (HPLS) and prolactin
- c. TRH and TSH
- d. GnRh and LH
- e. hCG and Thyroxine

answer E (haitham proved)

174. The secretion and release of growth hormone: Choose the incorrect answer:

- a. Is promoted by hypothalamic GH releasing hormone and is pulsatile in nature
- b. Is prompted by IGFS
- c. Is increased by exercise and stress
- d. Is promoted by acetylcholine indirectly
- e. Is strongly inhibited by hypothalamic somatostatin

answer B

175. During sleep there is a fall in the circulating level of: Choose the incorrect answer :

- a. cortisol
- b. T4.
- c. Growth hormone
- d. Adrenaline.
- e. insulin

answer A

176. The free functional percentage of Aldosterone is:

- a. relatively high
- b. very low
- c. very high
- d. high
- e. low

answer A

177. ACTH secretion is inhibited by

- a. Cortisol.
- b. Norepinephrine.
- c. Androstenedione.
- d. ADH.
- e. Testosterone.

answer A

ANATOMY SECTIONNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

1. Anterior Midline Masses:

- A. Thyroglossal duct cyst
- B. lateral cervical cyst
- C. hyoid cyst

answer A

2. All of the following are true considering Sheehan Syndrome EXCEPT:

- A. Lactotroph hyperplasia
- B. Relaxation of infundibular arteries
- C. can happen during pregnancy

answer B

3. Mismatch:

- A. Neuroendocrine - Anterior Pituitary
- B. severe headache – pituitary apoplexy

answer A

4. All of the following are TRUE except.

- A. Bright Spot on the (MRI) is Vasopressin from the Anterior Pituitary
- B. pituitary gland is medial to cavernous sinus and inferior to optic chiasm and superior to sphenoid air sinus
- C. Superior hypophyseal arteries supply pars tuberalis
- D. blood can flow from posterior lobe to anterior lobe of pituitary gland

answer A

5. The superior thyroid artery is initially associated with the _____ and must be ligated _____ during thyroidectomy.

- A. External Laryngeal Nerve, away from the gland
- B. Internal Laryngeal Nerve, away from the gland
- C. External Laryngeal Nerve, near from the gland
- D. Recurrent Laryngeal Nerve, near the gland
- E. Recurrent Laryngeal Nerve, away from the gland

answer C

6. When a mass is associated with the thyroid gland, and you ask the patient to swallow, the mass moves up, because of the:

- A. Paratracheal fascia
- B. Pretracheal Fascia
- C. laryngeal fascia
- D. attachment of muscles

answer B

7. Enlarged Thyroid which moves behind the sternum:

- A. True capsule of thyroid
- B. Retrosternal Goiter
- C. Hyoid bone

answer B

8. Thyroid Gland was formed between.

- A. Tuberculum Impar - Copula
- B. Ultimobranchial bodies- tuberculum impar
- C. first and second branchial arches

answer A

9. Wrong about pituitary:

- A. Hypothalamohypophyseal tract injury lead to ADH deficiency

- B. Posterior pituitary contain neurosecretory granules
- C. Anterior lobe give bright spot
- D. The gland is inferior to the optic chiasm

answer C

10. Upper Limitation of thyroid gland:

- A. Pretracheal fascia
- B. The superior belly of the omohyoid
- C. The capsule of thyroid

answer A
maybe b

11. Acidophils cells of the pituitary secretes:

- A- GH
- B- TSH
- C- ACTH

answer A

12. Which of the following is WRONG:

- A. Inferior parathyroid originate from dorsal wing of 4th pouch
- B. The thymus originate from ventral wing of 3th pouch
- C. oxyphil cells show low levels of PTH synthesis

answer A

13. Wrong about pituitary gland blood supply?

- A. The venous drainage of posterior pituitary lobe is into cavernous sinus
- B. Lymphatic drainage of thyroid gland is into superior and posterior deep cervical nodes
- C. Primary plexus drain into cavernous

answer C

14. Right about branchial fistula?

- A. They are midline in position
- B. It is formed because of failure of second pharyngeal arch to grow caudally over the third and fourth arches
- C. It is located posterior to sternocleidomastoid muscle

answer B

15. Wrong about thyroid drainage

- A. All drain into internal jugular vein
- B. Superior thyroid vein drains into the internal jugular vein
- C. The inferior thyroid veins of the two sides anastomose with one another as they descend in front of the trachea.

answer A

16. Parathyroid glands: which is incorrect:

a- Superior parathyroid glands receive most of their blood supply from the superior thyroid art.

2> parathyroid glands: which is incorrect:

a - the right parathyroid glands drain into the left internal jugular vein

17. thyroid gland: which is incorrect:

- a- the pyramidal represents the inferior part of thyroglossal duct
- b- Most of its blood supply is derived from the superior thyroid art

answer: B

18. Pituicytes are most precisely described as :

- a- modified neurons
- b- Secretory cells in the post pituitary
- C- Glial cells in the pars nervosa

answer: C

19. eosinophilic cytoplasm, few rER, no secretory granules and abnormally shaped mitochondria are typical characteristics of:

- a- chief cells of the parathyroid
- b- Oxyphil cells
- c- Cells of the zona glomerulosa
- d- Cells of the zona fasciculata
- e- Cells of the zona reticularis

answer: B

20. Oxyphil cells (wrong statement):

- a- derived from the ultimobranchial body

21. (wrong statement):

- a- the adrenal medulla is a modified parasympathetic ganglion.

22.pituitary gland (wrong statement)

- a- secretory cells are present near the capillaries in the pars nervosa
- b- Rathke's pouch is rudimentary in humans

answer: A