Test - control on "Endocrine system pathology" problem

- 1. Addison's disease is characteristic of the following :
 - 1. muscle weakness up to adynamia
 - 2. hypotension
 - 3. edemas
 - 4. low ECFV and dehydration
 - 5. hypernatremia with potassium loss
- 2. Point to possible etiologic factors to diabetes mellitus type I:
 - 1. viral infection
 - 2. HLA D-linked
 - 3. low level of insulin receptors
 - 4. overeating complicated by obese
 - 5. chemicals injuring endocrine pancreas
 - 6. low sensitivity of peripheral tissue to insulin
- 3. Etiologic agents of diabetes mellitus type II seem to be the following:
 - 1. viral infection
 - 2. hereditary predisposition
 - 3. low level of insulin receptors
 - 4. overeating complicated by obese
 - 5. chemicals injuring endocrine pancreas
 - 6. low sensitivity of peripheral tissue to insulin
- 4. The following features characterize eosinophil adenoma of pituitary gland arisen in children:
 - 1. gigantism
 - 2. hyperglycemia
 - 3. acromegaly
 - 4. negative nitrogen balance
 - 5. increased blood growth hormone
- 5. The following signs characterize eosinophil adenoma of pituitary gland arisen in the adults:
 - 1. gigantism
 - 2. hyperglycemia
 - 3. acromegaly
 - 4. predisposition to diabetes mellitus
 - 5. negative nitrogen balance
 - 6. increased level of GH in the blood

- 6. The following features are characteristic of adenoma of adrenal cortex zona fasciculate:
 - 1. eosinophilia
 - 2. arterial hypertension
 - 3. upper part of the body obese
 - 4. increased blood level cortisol
 - 5. osteoporosis
 - 6. predisposition to hypoglycemia
- 7. As for congenital adrenogenital syndrome in women the following characteristics are true:
 - 1. excess production of androgens
 - 2. high stature
 - 3. virilism
 - 4. hirsutism
 - 5. high level of urine estrogens
 - 6. hypoplasia of breasts and uterine

8. In patient with Addison's disease the following symptoms can be

- found: 1. muscle weakness up to adynamia
 - 2. skin hyperpigmentation
 - 3. high level of 17-ketosteroids in the blood
 - 4. cellular dehydration
 - 5. hypertension
 - 6. craving for salt

9. Hyperparathyroidism is characterized by:

- 1. decreased blood phosphates level
- 2. decreased Ca⁺⁺ blood level
- 3. nephrolitiasis
- 4. positive Chvostex's and Trusseau's symptoms
- 5. bone decalcination
- 6. decreased brain activity

10. Disturbances in endocrine functions associated with their abnormal central regulation are:

- 1. genetic abnormalities of their synthesis
- 2. disturbances in "day-night" regime
- 3. abnormal avidity of hormone to its transfer
- 4. appearance of antibodies to hormone
- 5. treatment with hormone overdose
- 6. treatment with psychotropic drugs

11. Disturbances in endocrine function associated with proper gland pathology are:

- 1. hypothalamus injury
- 2. low avidity of hormone to its blood transfer
- 3. gland hypoplasia
- 4. genetic defect of hormone synthesis
- 5. treatment with hormone overdoses
- 6. decreased expression of receptors to hormone

12. Endocrine pathology related to disturbances in peripheral effect of hormonal activity are:

- 1. elaboration of antibodies against some hormones
- 2. abnormal link of hormone to carrying protein
- 3. low level of substrate to hormone synthesis
- 4. hypothalamic disturbances
- 5. treatment with hormone overdoses
- 6. decreased number of receptors to the hormone

13. Predisposition to symptomatic diabetes mellitus seems to be possible in case of the following endocrine pathology:

- 1. acromegaly
- 2. gigantism
- 3. mixedema
- 4. insuloma
- 5. Cushing's disease
- 6. Addison's disease

14. Hypercortisolism is characteristic of:

- 1. osteoporosis
- 2. "striae gravidarum" on the abdomen skin
- 3. "moon" face
- 4. hypotension
- 5. hypoglycemia
- 6. total obesity

15. Probability to immune response seems to be characteristic towards the following hormones :

1. parathyrin	4. ACTH
2. growth hormone	5. progesterone
3. insulin	6. cortisol

- 16. The following factors seem to be responsible for arterial hypertension associated with hypercortisolism:
 - 1. direct vasoconstriction effect of glucocorticoids to blood resistive vessels
 - 2. friendly action of glucocorticoids and catecholomines to resistive blood vessels
 - 3. increased ECFV
 - 4. activation of RAAS-system
 - 5. loss of sodium by the kidneys
- 17. The most prominent features of Conn's syndrome are the following:
 - 1. arterial hypertension
 - 2. hypochloremic alkalosis
 - 3. hyperglycemia provoking by strong emotions
 - 4. hypernatremia with hypokalemia
 - 5. thirst and polyuria
 - 6. low muscle tone up to periodically paralysis

18. Complete pathogenetic chain of events leading to skin hyperpigmentation in the patient with Addison's disease:

- 1. increased synthesis and secretion of proopiomelanocortin by pituitary gland
- 2. low synthesis of cortisol by adrenal cortex
- 3. ACTH hypersecretion
- 4. accumulation of melanin in the skin
- 5. melanodermia

19. Hyperparathyroidism is characterized by:

- 1. tetania
- 2. osteomalacia
- 3. increased level of blood phosphates
- 4. linceased Ca⁺⁺ concentration in plasma
- 5. decreased plasma sodium

20. LATS -factor is present in serum of patient with:

- 1. hyperfunction of thyroid gland
- 2. hypofunction of thyroid gland

- 21. The following symptoms may be taken as the evidence of congenital adrenogenital syndrome in women:
 - 1. virilism
 - 2. high muscle tone
 - 3. low voice
 - 4. breasts and uterine hypoplasia
 - 5. tall stature

22. Adrenal cortex pathology may reveal itself in form of:

- 1. adrenogenital syndrome
- 2. Simmond's disease
- 3. Cushing's disease
- 4. pheochromacytoma
- 5. Addison's disease
- 6. Conn's syndrome
- 23. The following symptoms characterize pituitary nanism (dwarfism):
 - 1. increased blood GH
 - 2. hyperlycemia
 - 3. sexual infantilism
 - 4. normal intellect
 - 5. splanchnomicria
 - 6. low TTH production by pituitary gland

24. Transpituitary pattern of hormonal regulation is working for the following glands:

- 1. sex glands
- 2. adrenal cortex
- 3. adrenal medulla
- 4. parathyroid glands
- 5. thyroid gland
- 6. endocrine pancreas

25. Isosexual syndrome in the boy is characterized by the following symptoms:

- 1. early accelerated growth
- 2. enlargement of external sex organs
- 3. estrogenism
- 4. hypoplasia of testes
- 5. early close of epyphises

26. Possible causes of hyperthyroidism are the following:

- 1. lack of thyroliberin production
- 2. excess of TTH
- 3. LATS-factor production
- 4. low expression of the T3 and T4-receptors on the periphery
- 5. weak avidity of T3 and T4 to the protein transfers

27. The symptoms of hypothyroidism are:

- 1. accelerated protein catabolism
- 2. bradycardia
- 3. high energetic base rate
- 4. systolic hypertension
- 5. cool dry skin
- 6. increased TTH secretion

28. Hypofunction of thyroid gland may be revealed in form of following pathology:

- 1. Grave's disease
- 2. Cushing's disease
- 3. endemic cretinism
- 4. mixedema
- 5. acromegaly

29. Severe hypothyroidism in the adults possesses by the following features:

- 1. gain in weight
- 2. low energetic base rate
- 3. high level of blood cholesterol
- 4. slow thinking
- 5. edematous skin
- 6. tachycardia

30. The possible causes of hypothyroidism are:

- 1. congenital deficiency of iodine peroxidase
- 2. lack of iodine in food
- 3. Grave's disease
- 4. Hashimoto's goiter
- 5. adenoma of thyroid gland
- 6. lack of T3 and T4-receptors in appropriate tissues

31. GH overproduction by pituitary gland may lead to:

- 1. Addison's disease
- 2. acromegaly
- 3. obesity
- 4. gigantism
- 5. Cushing's disease

32. GH overproduction increases:

- 1. glucose blood level
- 2. glycogenilysis
- 3. uptake of aminoacids by tissue
- 4. somatomedins synthesis
- 5. lipolysis
- **33.** Sensitivity of target cells to prolong treatment with any hormone becomes:
 - 1. increased 2. decreased 3. not changed
- 34. Partial hypofunction of anterior pituitary may be manifested in form of:
 - 1. arterial hypertension
 - 2. hyperglycemia
 - 3. dwarfism
 - 4. hypogonadism
 - 5. hypothyroidism

35. Partial hyperfunction of anterior lobe of pituitary gland may reveal itself in form of:

- 1. early sex maturation
- 2. eunuchoidism
- 3. dwarfism
- 4. primary hyperthyroidism
- 5. Cushing's disease
- 6. galactorrhea
- **36.** Acute adrenal insufficiency may reveal itself by the symptoms:
 - 1. arterial hypotension
 - 2. dehydration
 - 3. hypernatremia
 - 4. hyperkalemia
 - 5. metabolic acidosis

37. Acute withdraw of glucocorticoids after prolong their uptake may be complicated by low secretion of:

- 1. parathyrin
- 2. catecholamines
- 3. ADH
- 4. ACTH
- 5. cortisl
- 6. aldosterone
- **38.** Waterhouse- Friderichen's syndrome is characterized by the triad of symptoms:
 - 1.hypotension
 - 2. multiple hemorrhagic purpura
 - 3.desorientiration in space and time
 - 4. cramps
 - 5. hypernatremia with hypokalemia
 - 6. metabolic alkalosis
- **39.** As a replacement therapy of acute adrenal insufficiency the following medicines must be used
 - 1. insulin
 - 2. catecholamines
 - 3. glucocorticoids
- 40. Total chronic adrenal insufficiency symptoms seem to be the following:
 - 1. hypovolemia
 - 2. melanodermia
 - 3. significant loss of weight
 - 4. hypernatremia
 - 5. hyperkalemia
 - 6. overeating

41. Point to high probable causes of acute adrenal insufficiency:

- 1. as outcome of Addison's disease
- 2. septicemia
- 3. acute withdraw of glucocorticoids after prolong their uptake
- 4. stress
- 5. acute deficiency of insulin
- 6. pheochromacytoma

42. Primary aldosteronism is charactrzed by the following features:

- 1. arterial hypotension
- 2. periodically cramps
- 3. polyuria and polydipsia at the late stage of disease
- 4. muscle weakness
- 5. tachycardia
- 6. hyponatremia

43. Increased expression of beta-receptors in some tissue may lead

to:

- 1. increased systolic arterial pressure
- 2. increased pulse pressure
- 3. tachycardia
- 4. exophtalmus
- 5. hyperglycemia
- 6. tremor and muscle weakness

44. Common features of Cushing's syndrome and Cushing's disease seem to be the following:

- 1. redistribution of fat deposition in use of upper part of the body
- 2. increased arterial pressure
- 3. skin hyperpigmentation in stretched area (abdomen)
- 4. the symptoms of virilism in women
- 5. hyperglycemia

45. The products of proopiomelanocortin (POMC) are the following:

- 1. ACTH
- 2. beta-endorphin
- 3. enkephalins
- 4. dinorphin
- 5. cortisol
- 6. P-substance

46. The following symptoms characterize ketoacidotic coma:

- 1. hyperglycemia
- 2. high plasma osmomolality
- 3. increased pH of blood
- 4. accumulation of keton bodies
- 5. cell dehydration
- 6. drop of fatty acids in the blood

47. Mechanisms are involved in diabetes mellitus type II development are:

- 1. diminished number of beta-cells in pancreas
- 2. low sensitivity of peripheral tissue to insulin
- 3. prolong hyperglycemia
- 4. overeating
- 5. hereditary predisposition
- 6. energetic starvation of muscle tissue

48. Mechanisms of ketosis in diabetes mellitus type I include:

- 1. increased lipolysis
- 2. activation of tissue proteinlipase
- 3. insufficiency of fatty acids metabolism in liver
- 4. decreased cycle Krebs' activity
- 5. energetic starvation of tissue

49. Absence of ketoacidotic coma in patient with diabetes mellitus type II may be explained by:

- 1. more fast development of this type of coma in comparison with osmomolar one
- 2. partial preservation of insulin secretion
- 3. high level of insulin hormone antagonists
- 4. severe cell dehydration
- 5. severe acidosis

50. As for ketoacidotic diabetic coma the following symptoms are prominent:

- 1. hyperglycemia up to 55mmol/L
- 2. blood pH is about 7.0
- 3. blood pH is about 7.35
- 4. osmonolality of plasma is about 350 mosmomol/kg
- 5. ketonemia 0,17 mmol/L
- 6. ketonemia 2.0 mmol/L

51. As forhyperosmomolar diabetic coma the following symptoms are very specific:

- 1.hyperglycemia is about 55 mmol/L
- 2. pH is 7.0
- 3. pH is 7.35
- 4. plasma osmomolality is about 350 mosmomol/kg
- 5. ketonemia 0.17 mmol/L
- 6. ketonemia 2.0 mmol/L

Second level tests on "Endocrine pathology"

52. List the main pathogenetic lines of endocrine function disturbances:

1...2...3...

- 53. Transpituitary pathway of regulation is characteristic of the following
 - endocrine glands:
 - 1...2...3...`
- 54. Parapituitary pathway of regulation is characteristic of the following endocrine glands:
 - 1...2...3...
 - **55.** List contrainsular hormones: 1...2...3...4...
 - **56.** Call the causes of primary adrenocortical insufficiency: 1...2...3...
 - **57.** Which hormones deficiency are responsible for disturbances in water-salt imbalance in Addison's disease? 1...2...3...
 - 58. Which mechanisms are involved in hypotension in Addison's disease?

1...2....4....

- **59.** Hypoglycemia in chronic adrenal insufficiency seems to be associated with the following pathogenetic factors: 1...2...3...
- **60.** List the mechanisms of such symptom as hyperglycemia in hypercortisolism: 1...2...3...
- 61. Call the most wide-spread causes of acute adrenocortical insufficiency:

62 The most wide-spread causes of primary hyperthyroidism belong to:

- 63. List pathogenetic bases of hyperparathyroidism in form of fibrous osteodystrophia:
- 64. The most characteristic features of diabetes mellitus type II are:

1...2...3...4...5..6...

- **65.** The most characteristic features of IDDM are: 1...2...3...4...5...6...
- **66.** List acute complications of diabetes mellitus 1...2...3...
- **67.** List late chronic complications of diabetes mellitus 1...2...3...4...
- **68.** Which hormones increase lipolysis 1...2...3...
- **69.** Therapy of acute adrenal insufficiency includes: 1...2...3...
- 70. Waterhouse- Friderichsen's syndrome reveals itself by the symptoms: 1...2...3...
- **71.** The most often causes of Waterhouse –Friderichsen's syndrome are 1...2...3...
- 72. Positive Chvostex's and Trusseau's symptoms are revealed in following diseases:

1...2...

- 73. Simmond's disease is characteristic of lack the following hormones:
 - 1...2...3...4...
- 74. What pathogenetic factor can explain a short stature of pigmies in Africa?

^{1...2...3...}

^{1...2...3...}