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TOPIC: OBJECT PATHOPHYSIOLOGY

1. What does pathological physiology study?

- A) Manifestations of disease.
- B) Functions of systems and organs.
- C) Common laws appearance, development, current and outcomes pathological processes and diseases.**

2. Mark main method of pathological physiology

- A) Acute experiment.
- B) Chronic experiment.
- C) Experiment with treatment.
- D) Pathophysiological experiment.**

3. Mark correct understanding term of «Etiology».

- A) Teaching about definite cause(reason).
- B) Many reasons can produce disease.
- C) Teaching about causes and conditions appearance of pathologic process or disease.**

4. Mark correct understanding term of «Pathogenesis»

- A) Sum of changes by development of disease.
- B) Pathogenesis is origin of disease.

C) Pathogenesis is teaching about appearance, development and outcome of pathological process or disease

5. What is «Nosology»?

- A) Teaching about typical pathology.
- B) Teaching about disease.**
- C) Teaching about changes in organs

6. What is vicious cycle?

- A) Consequence of events, by which chain of pathogenesis produces effect and interrupts development pathological process.
- B) Process, by which chain of pathogenesis does not produce
- C) formation of disease.
- D) It is such cause-effect correlations, which can form cycle. Such phenomenon makes current of pathological process or disease more heavy and dangerous.**

7. What is «Etiology»?

- A) Sum of conditions, producing disease.
- B) Teaching about consequences of disease.
- C) Teaching about causes and conditions of disease.**

8. What is main chain of pathogenesis?

- A) The final chain of pathogenesis.
- B) The leading pathogenetic chain. Removal of its prevents next development pathological process or disease.**

9. What is the base of pathogenesis?

- A) The cause-effect correlations, where the cause produces effect and next effect is a cause next effect, supplying development pathologic process or disease.**
- B) The final pathogenetic chain.

10. Mark definition of «Nosology».

- A) Teaching about causes of disease.
- B) Teaching about disease.**
- C) Teaching about pathologic process.

11. Classification of secondary(acquired) reactivity.

- A) Specific (immunological) and nonspecific.**
- B) Adaptive and constitutional.
- C) Basic and allergic.

12. Choice correct definition reactivity of the organism.

- A) Capacity of the organism to react on different etiological factors.
- B) Capacity of the organism to react on external and internal factors with complex defans-adaptive reactions.**

13. Mark the most important resistance by children.

- A) Mechanisms of passive resistance.**
- B) Mechanisms of active resistance

14. Mark tendency to diseases in hypersthenic.

- A) Hypotension.
- B) Hypertension.**
- C) Gastro-intestinal tract.

15. Mark tendency to diseases in hyposthenics.

- A) Diabetes mellitus.
- B) Pathology of lungs.**
- C) Hypertension.

16. Mark big risk development of disease by Men.

- A) Myxedema.
- B) Hypotension.
- C) Infarct of myocardium.**
- D) Hyperthyroidism.

17. Mark big risk development disease by women.

- A) Ulcer of stomach.
- B) Fever.
- C) Pathology of liver.**
- D) Cancer of lungs.

Topic: Pathogenetic influence electricity and ionization on the organism.

18. What ionizing factor can have the most big penetration in object.

- A) Alfa-particles.
- B) Betta- particles.
- C) Neutrons.**

19. Which ionizing factor can produce the most big ionization?

- A) X-rays.
- B) Alfa-particles.**
- C) Gamma-rays.

20. Mark the most radiosensitive cells.

- A) Muscle cells.
- B) Cell of Thymus and lymph nodes.**
- C) Epithelium of skin.

21. Mark the most radio resistant cells.

- A) Epithelium of skin.
- B) Nerves cells.**
- C) Endothelium.

22. What remote (distant) consequences by damaging influence of ionizing radiation?

- A) Shortening of life span.
- B) Development of malignant tumors.
- C) Sexual disorders.
- D) Disorders in offspring's.
- E) All above mentioned.**

23. Mark main factors that can define damaging influence of electricity on the organism.

- A) Physical indexes.
- B) Path of electricity.
- C) Reactivity of the organism.
- D) **All above mentioned.**

24. What path of electricity in the organism of man is the most dangerous?

- A) Through the legs.
- B) **Through the heart and brain.**

25. Mark main reasons(causes) of death by effect of electricity.

- A) Damage of the lungs.
- B) Damage of the muscles.
- C) **Fibrillation, cardiac arrest and stop of breathing.**

26. Mark states of the organism, when decreases damaging Influences of electricity.

- A) By narcosis.
- B) On time of sleeping.
- C) In state of extreme excitation.
- D) **All above mentioned.**

Topic: Typical disorders of peripheral blood circulations.

27. What does mean «centralization of blood circulation»?

- A) Circulation of blood in big vessels.
- B) Circulation of blood in vital organs (brain, heart, liver).
- C) Circulation of blood through arteriolo-venule anastomosis (shunts). Blood can't pass through the capillaries.**

28. In what section of vascular system can begin formation aggregation of blood cells?

- A) Big vessels.
- B) Arterioles.
- C) Venules.**

29. Neurotonic hyperemia can form due to:

- A) Increase tonus of dilatators.**
- B) Decrease tonus of vasoconstrictors.
- C) Increase contractility of myocardium.

30. Neuroparalytic hyperemia can form:

- A) By decrease tonus of parasympathetic nervous system.
- B) By desympathization.**
- C) By paralysis of extremities.

31. Mark vessels, where thrombus can form the most frequent.

- A) Big arteries.
- B) Arterioles.
- C) Venus.**

Topic: Hypoxia.

32. What is base of respiratory hypoxia?

- A) Disorder gas exchange in the lungs.**
- B) Increase use of oxygen.
- C) Decrease use of oxygen.

33. Mark correct definition of hypoxia.

- A) Decrease oxygen in the blood.
- B) Decrease oxygen or its utilization into the cells.**

34. What is base hemic (anemic) type of hypoxia?

- A) Intensive use of oxygen in the cells.
- B) Decrease oxygen capacity and oxygen transport function of the blood.**
- C) Decrease pumping function heart.

35. What is base of circulatory hypoxia?

- A) Acceleration of blood inflow to the cells.
- B) Decrease of blood inflow to the cells (ischemia, venous hyperemia, cardiac insufficiency).**

36. What is base of tissue hypoxia?

- A) Decrease functional capillaries.
- B) Centralization of blood circulation.
- C) Disorder use of oxygen or energetic substances by tissue breathing.**

37. What type of metabolism is discorded by hypoxia first of all?

- A) Water-electrolyte.
- B) Carbohydrate
- C) Energetic.**
- D) Protein.
- E) Lipid.

38. Effects of what hormones can have privilege by hypoxia?

- A) Insulin.
- B) Somatotropin.
- C) Corticotropin.
- D) Contrinsular hormones.**

Topic: Pathophysiology of Pain and Stress.

39. Mark term, which means increased Pain sensitivity.

- A) Hypersensitivity.
- B) Hyperalgesia.**
- C) Placebo.

40. Mark changes by Pain, leading to increase arterial blood pressure.

- A) Decrease common peripheral resistance.
- B) Bradycardia.
- C) Tachycardia and increase general peripheral resistance.**

41. Localized somatic Pain occurs by pass
Impulses along:

- A) C- fibers.
- B) **A-delta fibers.**
- C) A-beta fibers.

42. Increase systemic arterial pressure by somatic
Pain connect with:

- A) Activation parasympatho nervous system.
- B) **Activation sympatho-adrenal system.**
- C) Stimulation betta-cells of Pancreas.

43. Increase quantity of leucocytes in circulated
blood by somatic Pain occurs due to:

- A) Hypothyroidism.
- B) Hyperglycemia.
- C) **Activation of sympatho-adrenal system.**

44. What term is used for etiology of Stress.

- A) Adaptogen.
- B) Algogen.
- C) **Stressor.**

45. What hormone can stimulate cortex of adrenal glands?

- A) Corticoliberin.
- B) **Corticotrophin (corticotrophin).**
- C) Vasopressin.

46. What system does fulfill leading role in development of Stress?

- A) Hypothalamus-hypophysal-ovarial .
- B) **Sympatho-adrenal.**
- C) Hypothalamo-neurohypophysal

47. What effect can produce glucocorticoids by Stress.

- A) Stimulation gluconeogenesis.
- B) **Stimulation of glycogenolysis (permissive effect).**
- C) Disorder coupling between oxidation and Phosphorylation.

48. What effect can produce Stress on immunity?

- A) Stimulation.
- B) **Inhibition (immunodeficiency state).**

Topic: Typical disorders of metabolism.

49. Main mechanism disorder energetic exchange.

- A) Stabilization membranes of lysosomes.
- B) Activation of RNA.
- C) Disorder coupling between oxidation and phosphorylation.**

50. Show mechanism disorder splitting carbohydrates.

- A) Increase proteolytic enzymes.
- B) Deficit of hydrolysis.**
- C) Increase activity of lipases.

51. Main etiological factor of hyperglycemia.

- A) Excess of insulin.
- B) Deficit of of contrinsular hormones.
- C) Deficit of insulin, prevailing effect of contrinsular hormones.**

52. Show final **substances of** protein metabolism.

- A) Acetone.
- B) Ammonia, urea, glutamine.**
- C) Aminoacids.

53. Main path inactivation of ammonia in Kidneys.

- A) Connection with proteins.
- B) Ammoniogenesis.**
- C) Interaction with lipids.

54. By insufficiency of what organs can form hyperazotemia?

- A) Insufficiency of the lungs.
- B) Insufficiency of the Heart.
- C) Insufficiency of kidneys and liver.**

55. When can form disorder digestion and absorption of proteins in gastrointestinal tract.

- A) Increase secretion of hydrochloric acid.
- B) Secretion of gastromucopronein.
- C) Decrease secretion of pepsin, gastricsin, trypsin, HCL.**

56. What mechanism is base disorders of splitting and absorption of lipids?

- A) Deficit of amilasa.
- B) Insufficiency emulsification of lipids.**
- C) Excess of peptidasis.

57. What mechanism does have important role in development of atherosclerosis.

- A) Hyperpoteinemia.
- B) **Hyperlipoproteinemia.**
- C) Reflectory.

58. What vessels are damaged by atherosclerosis?

- A) Venas.
- B) **Musculo-elastic vessels.**
- C) Capillaries.

59. When can form mobilization of fat from fat depots?

- A) By hyperlipidemia.
- B) **By decrease quantity of glucose in the blood.**
- C) By hypoproteinemia.

60. What componens does keton bodies consist of?

- A) Lipids.
- B) Lipid acids.
- C) **Aceton, aceto-acetic acid, Betta-oxibuthiric acid.**

Topic: Disorder of acid-base balance.

61. Mark physiological level pH of the blood.

- A) 7,5-8,0
- B) 7,36-7,44**
- C) 6.0-7,0

62. By what processis can form metabolic acidosis?

- A) Hypoxia.
- B) Renal insufficiency.
- C) Hepato-cellular insufficiency
- D) Cardial insufficiency.
- E) All above mentioned.**

63. Show endocrine disorders, by which can form alkalosis.

- A) Hyperthyroidism.
- B) Hypothyroidism.
- C) Primery aldosteronism**

64. What function in buffer system of the blood can fulfill hemoglobin?

- A) Base.**
- B) Acid.**

65. How can change reaction of urine by respiratory alkalosis?

- A) It is not change.
- B) Urine can be alkaline.**
- C) It can be acidic.

66. What is acidosis?

- A) Excess of hydrogen ions.**
- B) Excess of bases.

67. What is alkalosis?

- A) Excess of acids.
- B) Deficit of bases.
- C) Deficit of hydrogen ions.**

68. Patient has pH of the blood 7,2. Mark type disorder of acid – base balance.

- A) Compensatory alkalosis.
- B) Decompensatory alkalosis.
- C) Compensatory acidosis.
- D) Decompensatory acidosis.**

69. Patient has pH of the blood 7,7. Mark type disorder of acid – base balance.

- A) Compensatory alkalosis.
- B) Compensatory acidosis.
- C) Decompensatory alkalosis.**

Topic: Inflammation

70. Mark process, which increase oncotic pressure in focus of Inflammation.

- A) Increase synthesis of carbohydrates.
- B) Decreases synthesis of proteins.
- C) Damage cells and increase quantity of proteins in focus of Inflammation.**

71. How can form emigration of leucocytes in focus of inflammation?

- A) Active.**
- B) Passive.

72. Why can form redness in focus of inflammation?

- A) Due to development of arterial hyperemia.**
- B) Due to venous hyperemia.
- C) Due to depot of venous blood.

73. Mark process, which produce heat in focus of inflammation.

- A) Increase cellular breathing.**
- B) Decrease metabolism.
- C) Depot venous blood.
- D) Centralization of blood circulation.

74. Mark influence of sympato-adrenal system on inflammation.

- A) Don't influence.
- B) Acceleration.
- C) **Inhibition.**

75. Mark influence of parasympathic nervous system on inflammation.

- A) Inhibition.
- B) **Acceleration.**
- C) Doesn't influence.

76. By what types of inflammation is the most intensive emigration of leucocytes?

- A) Proliferative.
- B) Serous.
- C) Fibrinous.
- D) **Purulent.**

77. What processes are the most intensive by chronic inflammation?

- A) Exudative.
- B) Alterative.
- C) **Proliferative.**

78. What leucocytes can produce proteolytic enzymes?

- A) Eosinophils.
- B) Basophils.
- C) Lymphocytes.
- D) Neutrophils.**

79. What process can be used for treatment of inflammation.?

- A) Ischemia.
- B) Arterial hyperemia.**
- C) Venous hyperemia.

80. Development of Fever by inflammation can form due to release:

- A) Exogenic pyrogens.
- B) Endogenic pyrogens.**
- C) Serous exudate.

Topic: Action of changed temperature on the organism

81. Mark localization center of thermoregulation.

- A) Thalamus.
- B) Cortex of the brain.
- C) Preoptic zone of Hypothalamus.**
- D) Cerebellum.

82. What reason(cause) of endogenic hyperthermia?

- A) Decrease heat production. Increase heat loss.
- B) Increase sweating(perspiration).
- C) Disorder coupling between oxidation and phosphorylation In mitochondria.**

83. By damage of what structures of the brain can be desorbed thermoregulatory reactions in the organism?

- A) Cortex of the brain.
- B) Thalamus.
- C) Extrapyramidal centers.
- D) Hypothalamus.**

84. What types of hypoxia can form by hypothermia?

- A) Respiratory.
- B) Hemic(anemic).
- C) Circulatory.
- D) Tissue.
- E) All above mentioned.**

85. How can change quantity of primary heat by disorder coupling between oxidation and phosphorylation.

- A) Increase.**
- B) Decrease.
- C) It is not changed.

86. Why can form tachycardia in first stage of hyperthermia?

- A) Increase tonus parasympathic nervosa system.
- B) Increase activity of sympatho-adrenal system.**
- C) Decrease arterial blood pressure.

87. How can change diameter of vessels by influence of cold?

- A) Dilatation.
- B) Angiospasm.**
- C) Reaction will be absent.

88. How can change heat production in first stage of hypothermia?

- A) **Increase.**
- B) Decrease.
- C) It is not changed.

89. What changes in the blood can form in first stage of hypothermia?

- A) **Increase quantity of glucose.**
- B) Decrease quantity of cholesterol.
- C) Increase quantity of lipid acids.

90. How can change rhythm of the heart by hypothermia in stage of decompensation?

- A) Tachycardia.
- B) **Bradycardia.**
- C) Rhythm is not changed.

91. What body temperature of man is lethal.

- A) 30 C.
- B) 28 C.
- C) **24-25 C.**

92. Mark clinical symptoms first stage of frost bite.

- A) Cyanosis.
- B) Formation of bubbles.
- C) Necrosis.
- D) Redness.**

93. How can change rate contraction of myocardium by increase body temperature on one degree centigrade?

- A) It is not change.
- B) Increase on 8-10 contractions.**
- C) Increase on 20-30 contractions.

94. What substance is not endogenic pyrogen?

- A) Insulin.**
- B) Interleukin 1.
- C) Interleukin 2.
- D) Tumor necrotic factor – alfa.

95. Mark effect surplus of perspiration(sweating).

- A) Hypohydratation.**
- B) Hyperhydratation.

96. What can allow to form hyperthermia?
- A) **High temperature of external environment.**
 - B) Low temperature of external environment.
 - C) Intensive cold wind.

97. What changes in the brain can appear by heat stroke?
- A) Decrease intracranial pressure.
 - B) **Hyperemia and hemorrhages.**

Topic: Fiver. Etiology, pathogenesis, principles of treatment.

98. Can organism to regulate heat balance by fever?
- A) **Yes.**
 - B) Not.

99. Decrease heat loss can form by:
- A) Dilatation of skin vessels.
 - B) **Angiospasm of skin vessels.**
 - C) Decrease of perspiration.

100. Mark the source of endogenous pyrogens.

- A) Viruses.
- B) Ricketts.
- C) Neutrophils and macrophages.**

101. In what stage of fever thermoregulatory center accept temperature of inflow blood as normal?

- A) First stage.
- B) Second stage.**
- C) Third stage.

102. How can change heat loss in third stage of fever?

- A) It is not change.
- B) Increases.**
- C) Decreases.

103. What complication in third stage of fever can develop?

- A) Dispnoea.
- B) Intensive perspiration(sweating).
- C) Collapse (decrease arterial blood pressure).**

104. How can change blood flow in vessels of skin in first stage of fever?

- A) It is not change.
- B) Increases.
- C) **Decreases.**

105. How can change diuresis in second stage of fever?

- A) **Decrease.**
- B) Increases.
- C) Absence of changes.

106. How can change thermoregulation by fever?

- A) It is disordered.
- B) Decreased.
- C) **Reconstruction on new more high level.**

107. How can change heat loss in first stage of fever?

- A) **Decreases.**
- B) Increases.

108. When by fever can form trembling (shivering).

- A) By aseptic inflammation.
- B) **By infectious inflammation.**
- C) By hypoxia.

109. How can change frequency of pulse in second stage of Fever?

- A) It is not change.
- B) Increase.**
- C) Decrease.

110. Perspiration can form by fever in:

- A) First stage.
- B) Second stage.
- C) Third stage.**

111. What functions of limphnodes are barriers?

- A) Fixation of antigens in tissue of regional limphnodes and development of inflammation.**
- B) Contractile activity.

112. Mark barrier structures.

- A) Bones.
- B) Thymus.
- C) Muscles.
- D) Lymphnodes.**

113. Mark the most powerful humoral factor of nonspecific resistance.

- A) lysozyme.

B) Complement.

C) Properdin.

D) Betta-lysine's.

114. Show reasons(causes) disorders of phagocytosis due to Its suppression.

A) Excess of blocking antibodies.

B) Deficit of transfer factor.

C) Deficit and excess thyrotropin.

115. Mark bactericidal effect mucosa of gastro – intestinal and respiratory tracts.

A) Glucuronic acid.

B) T-lymphocytes.

C) Secretory immunoglobulins A.

D) Must cells.

116. Mark physiological and pathological acts, directed on removal toxical and infectious substances.

A) Vomiting.

B) Cough.

C) Perspiration.

D) All factors.

117. Show cooperation of cells, which are necessary for antibody genesis.

- A) Macrophage + T-helper.
- B) Macrophage + T- helper + B –lymphocyte.**
- C) Macrophage + B-cell + mast cell.

Topic: Allergy. Etiology. Pathogenesis.

118. Show right definition of «Allergy».

- A) Allergy is state of increased sensitivity organism to repeated contact with allergens. The base of allergy is immunological mechanism.**
- B) Allergy is reaction on enter in the organism foreign macromolecule.

119. Mark peculiarities of specific hyposensibilization.

- A) Produces with antihistamine drugs.
- B) Use allergen, which produced allergy.**
- C) Produces with glucocorticoid hormones.

120. Anaphylactic type of allergy can form by immunological conflict between allergen and:

- A) Ig M.
- B) Ig G.
- C) Ig A.
- D) Ig E.**

121. Mark immunological conflict by delayed (cellular) type of allergy.

- A) Sensitized T-lymphocytes (T-killers) + allergen.**
- B) Allergic antibodies + allergen.
- C) T-lymphocyte + T – suppressors.

122. Immunocomplex types of allergy can form by interaction between allergen and:

- A) Ig M and G + activation of complement.**
- B) Ig A.
- C) Ig E.

123. Mark substances, which can be liberated in pathochemic stage cellular (delayed) allergy.

- A) Histamine and serotonin.
- B) Lymphokines.**
- C) Prostaglandins.

124. Schwartsman phenomenon can form due to:

- A) Activation of lymphocytes.
- B) **Activation of complement.**
- C) Increase sensitivity of cholinoreceptors.

125. Mark main mediator of immediate type allergy.

- A) Interferon.
- B) Transfer factor.
- C) **Histamine.**

126. Mark role of T-helpers in antibodygenesis.

- A) **Recognition of antigen.**
- B) Formation of antibodies
- C) Release of lymphokines.

127. Show local delayed allergic reactions.

- A) Anaphylactic shock.
- B) **Tuberculin test.**
- C) Pollenoses.

128. Mark conditions which are necessary for the development of allergic reaction.

- A) Contact with allergen.
- B) Hanger and contact with allergen.

C) Sensibilization of the organism and repeated contact with allergen, which produced sensibilization.

129. Stimulation of what type of immunity are necessary for the development of immediate type allergy.

- A) Cellular.
- B) Humoral.**
- C) Active.
- D) Passive.

130. Mark main chain pathogenesis of immediate type allergy.

- A) Increase potassium.
- B) Increase of histamine.**
- C) Increase of interferon.

Topic: Pathophysiology of shock

131. What is main chain of shock:

- A) Circulatory hypoxia.
- B) Excessive afferentation.**
- C) Increase formation of enkephalines and endorphins.

132. What type of hypoxia can develop by shock?

- A) Respiratory.
- B) Anemic.
- C) Cardio-vascular.
- D) Mixed.**

133. What pathological types of breathing can develop by shock.

- A) Chain-Stoks.
- B) Biot.
- C) Kussmaul.
- D) All above mentioned.**

134. What type of metabolism can be disordered first of all by shock?

- A) Protein.
- B) Lipid.
- C) Energetic.**
- D) Carbohydrate.

135. What type of shock can develop the most often.

- A) Anaphylactic.
- B) Septic.
- C) Traumatic.**

PATHOPHYSIOLOGY ORGANS AND SYSTEMS.

Topic: Posthemorrhagic syndrome.

136. Mark factors, which can influence on outcome of hemorrhage.

- A) Volume hemorrhage.
- B) Speed (rate) hemorrhage.
- C) Reactivity of the organism.
- D) All above mentioned.**

137. Mark phase of compensation by acute hemorrhage.

- A) Cardial.
- B) Reflectory.**
- C) Cerebral.

138. When after hemorrhage extra cellular liquid can enter in the capillaries the most intensive?

- A) First 30 minutes.**
- B) After 1-2 Hours
- C) After one day.

139. What volume of hemorrhage is lethal?

- A) 10%.
- B) 30%
- C) 60%**

140. When after small hemorrhage can be reestablished proteins in the blood?

- A) After one day.**
- B) After 3 days.
- C) After 6 days.

Topic: Pathology of erythrone

141. In what direction can form curve of Price-Jones by iron deficiency anemia?

- A) On the right.
- B) On the left.**
- C) Changes are absent.

142. Hypochromia of erythrocytes can develop by anemia:

- A) Hemolytic.
- B) Aplastic.
- C) Iron deficiency.**

143. Mark anemia, by which practically are absent reticulocytes.

- A) **Aplastic.**
- B) Hemolytic.
- C) Acute posthemorrhagic.

144. Mark anemia, by which it is necessary to wait (expect) hyper regenerative erythropoiesis.

- A) Vitamin B12 deficiency.
- B) Aplastic.
- C) **Hemolytic.**

145. Absolute erythrocytosis can develop by:

- A) **Cardial insufficiency.**
- B) Dehydration.
- C) Diarrhea.

146. Show cause relative erythrocytosis.

- A) Increase synthesis of erythropoietins in kidneys
- B) Increase metabolism in red bone marrow.
- C) **Dehydration.**

Topic: Pathology of hemostasis and leukon

147. Mark process, by which can form leukemoid reaction.

- A) Infarct of the myocardium.
- B) Renal insufficiency.
- C) Sepsis.**

148. Mark hormone, effect of which can produce leukocytosis.

- A) Aldosterone.
- B) Cortisol.**
- C) Antidiuretic. (ADH).

149. Mark changes leucocytes in the blood by infection in stage neutrophilic struggle.

- A) Neutropenia.
- B) Neutrophilia with regenerative shift of leucocyte formula on the left.**
- C) Eosinophilia.

150. Mark natural antiaggregants.

- A) cAMP, prostacyclin.**
- B) Serotonin.
- C) Adrenalin.

151. Show aggregants.

- A) Collagen.
- B) Thrombin.
- C) Adrenalin.
- D) Noradrenalin.
- E) cADP.
- F) Thromboxane A₂
- G) **All above mentioned.**

152. What leucopenia can form by influence ionization and cytostatics.

- A) Leucopenia due to redistribution of leucocytes.
- B) **Inhibition of leucopoiesis in red bone marrow.**
- C) Loss of leucocytes.

153. What stage coagulation of the blood is impaired by decrease quantity of thrombocytes?

- A) **First.**
- B) Second.
- C) Third.

154. By leukemic form of leucosis quantity of leucocytes in 1 mm³:

- A) **Hundred thousands.**

- B) Tenth thousands.
- C) Normal.

155. Mark peculiarity of leucocyte formula by acute myeloid leucosis.

- A) 95-98 lymphocytes.
- B) Leukemic gap(trap).**
- C) Shadow of Botkin-Gumprecht.

156. Mark factor, which is necessary for the development third phase of blood coagulation.

- A) Fibrinogen.**
- B) Prothrombin.
- C) Thromboplastin.

157. Mark factor, which is necessary for the development second phase of blood coagulation.

- A) Proconvertin (VII).
- B) Prothrombin (II).**
- C) Fibrinogen. (I)

158. Deficit of what plasmatic factor is base pathogenesis of hemophilia A?

- A) Proconvertin (YII).
- B) Antihemophylic A (YIII).**
- C) IX.
- D) X.

Topic: Pathology of the heart. Cardiac arrhythmias.

159. Mark reasons of reflector sinus tachycardia.

- A) Hypoxia.
- B) Decrease systemic arterial blood pressure.
- C) Pain.
- D) All above mentioned.**

160. Mark reasons of refractory sinus bradycardia.

- A) Golts reflex.
- B) Ashner reflex
- C) Chermak – Hering reflex.
- D) All above mentioned.**

161. Mark peculiarity of ECG by sinus tachycardia.

- A) Widening ventricle complex.
- B) Lengthening interval PQ.
- C) Shortening of common diastole.**

162. Mark reasons disorder of conductivity in myocardium.

- A) Decrease quantity of potassium ions.
- B) Increase quantity of potassium ions.**
- C) Increase quantity of sodium ions.

163. Show arrhythmia of myocardium, which can form due to disorder of excitability and conductivity.

- A) Transformation of rhythm.
- B) Alternative pulse.
- C) Exstrasystole (premature beat).**

164. Mark clinical manifestations syndrome of Morgany-Edem-Stock.

- A) Increase systemic arterial blood pressure.
- B) Loss of consciousness.**
- C) Hyperemia of face.

165. Show nomotopic arrhythmia.

- A) **Sinus tachycardia.**
- B) Ideoventricule rhythm.
- C) Exstrasystole.

166. Mark arrhythmia, the base of which is re-
enter-mechanism.

- A) Sinus bradycardia.
- B) Sinus tachycardia.
- C) **Paroxysmal tachycardia.**

167. Mark normal charge membrane of cells sino-
atrial node.

- A) **50-60 mv of negativity.**
- B) 60-70 mv of negativity.
- C) 80-90 mv of negativity.

168. Mark the most often cause of paroxysmal
tachycardia.

- A) Vagotonia.
- B) **Emotional and physical stress.**
- C) Leukocytosis.

169. Mark possible clinical manifestations of
cardial arrhythmias.

- A) Accelerathon cardiac rhythm.

- B) Bradycardia.
- C) Decrease systemic arterial blood pressure.
- D) Pain in the heart.
- E) **All above mentioned.**

170. By what stage of atrioventricular block can form different contractions of atriums and ventricles?

- A) First.
- B) Second.
- C) Third.
- D) **Forth.**

Topic: Disorder arterial blood presature.
Atherosclerosis. Ischemic heart disease.

171. In what artery can form atherosclerosis the most often?

- A) **Coronary.**
- B) Subclavicular.
- C) Axillary.

172. Name theories, which can explain development of atherosclerosis.

- A) Vascular.
- B) Plasmatic.
- C) **All above mentioned.**

173. Mark hemodynamic mechanisms, which can define systemic arterial blood pressure.

- A) Minute volume of blood circulation.
- B) Common(general) peripheral resistance.
- C) **All above mentioned.**

174. Mark diseases of arterial vessels depending on damage its wall.

- A) **Intimal.**
- B) Inflammatory.
- C) Degenerative.

175. What pressor mechanism take part in formation of reflexogenic hypertension?

- A) **Baroreceptor.**
- B) Endothelial.
- C) Hepatic.

176. Name depressor mechanism regulation of vascular tonus.

- A) Cellular.
- B) Renin-angiotensin- aldosterone.
- C) **Kallicrein-kinin system.**

177. Mark refractory pressor mechanism regulation of arterial pressure.

- A) **Chemoreceptory.**
- B) Endothelial.
- C) Volume.

178. Mark factor, which allow development atherosclerosis.

- A) Growth.
- B) **Obesity.**
- C) Hyperthyroidism.

179. Mark antiatherogenic factor.

- A) Chylomicrons.
- B) **Lipoproteins of high density.**
- C) Lipoproteins of very low density

180. Atherosclerosis is:

- A) Local inflammatory process.
- B) Local degenerative process.
- C) Systemic disease, the base of which is degenerative change intima elastic and muscular-elastic vessels with formation of atheroms.**

181. Disorder of what type metabolism by hypercortisolism can lead to development of hypertension?

- A) Carbohydrate.
- B) Protein.
- C) Lipid
- D) Water-electrolyte.**

182. Is it possible involution of atherosclerosis?

- A) Yes.**
- B) No.

183. Mark renal depressor mechanism.

- A) Renin-angiotensin-aldosterone.
- B) Serotonin.
- C) Adrenalin(epinephrine).
- D) Volume mechanism.**

Topic: Insufficiency of blood circulation.

Cardiac insufficiency.

184. Reperfusion by ischemic heart disease is due to:

- A) Inflow of nutrients.
- B) Formation excess (surplus) of peroxydes.**

185. Mark possible complications of ischemic heart disease.

- A) Aneurism of the heart.**
- B) Atherosclerosis.
- C) Amyloidosis.

186. Mark etiology of Ischemic heart disease.

- A) Hypodinamia.
- B) Thrombosis of coronary artery.**
- C) Obesity.

187. Mark stages infarct of myocardium in order of its development.

- A) Latent. Ischemic. Necrotic.
- B) Ischemic. Necrotic. Organisation.**

188. Mark unfavorable outcome infarct of myocardium.

- A) Aneurism.
- B) True breaking of myocardium.
- C) Death.
- D) **All above mentioned.**

189. Resorbative-necrotic syndrome is characterized by:

- A) Formation of endogenic pyrogens.
- B) Appearance in the blood products of proteolysis and enzymes.
- C) Loss of electrolytes from cardio myocytes.
- D) **All above mentioned.**

Topic: Insufficiency of external breathing.

190. By disorder of what process in the lungs can form mechanism of «alveolar shunt»?

- A) **Ventilation.**
- B) Diffusion.
- C) Perfusion.

191. Mark diseases in the lungs, by which can form mechanism «expiratory closing of breathings ways» (gas or air trap)?

- A) Pneumonia.
- B) Bronchial asthma.
- C) Bronchitis.
- D) All above mentioned.**

192. How can changed pH of the blood by respiratory insufficiency?

- A) Metabolic acidosis.
- B) Metabolic alkalosis.
- C) Gas acidosis.**

193. How can change minute volume of respiration by respiratory insufficiency?

- A) Increased.**
- B) Decreased
- c) Normal.

194. How can change consumption of oxygen by disorder «coupling between oxidation and phosphorylation»?

- A) Decrease.
- B) Increase.**
- C) It is not changed.

195. What substances can form methemoglobin in the blood?

- A) **Nitrates.**
- B) Antibiotics.
- C) Vitamins.

196. By what type of hypoxia utilization of oxygen and nutrients can be disturbed?

- A) Anemic(hemic).
- B) **Tissue (histotoxic).**
- C) Respiratory.
- D) Cardio-vascular(circulatory).

197. What middle indexes partial pressure of oxygen and carbon dioxide in the blood coming to the lungs?

Oxygen	Carbon dioxide
A) 90 mm Hg	60 mm Hg
B) 70 mm Hg	50 mm Hg
C) 40 mm Hg	46 mm Hg
D) 30 mm Hg	35 mm Hg

198. Mark causes by which can be disturbed diffusion in the lungs.

- A) Lungs edema.
- B) Pneumonia.

- c) Pneumoconiosis.
- d) **All above mentioned.**

199. Mark etiology of cardio-vascular type respiratory Insufficiency.

- A) Pneumonia.
- B) **Shock and collapse.**
- C) Bronchial asthma.

Topic: Pathophysiology of digestion

200. Deficit of what type vitamin is it necessary to wait by atrophy stomach mucous?

- A) Vitamin C.
- B) Vitamin A.
- C) Vitamin D.
- D) **Vitamin B 12**

201. How can change intensity fermentation and putrefaction by delay evacuation of food from stomach?

- A) **Increases.**
- B) Decreases.
- C) It is not changed

202. How stress can influence on development stomach ulcer and duodenum?

- A) It does not influence.
- B) Accelerate.**
- C) Inhibit.

203. What is main cause(reason) of stomach ulcer?

- A) Deficit effects of acidic-peptic factor.
- B) Superiority effect of acidic-peptic factor.**

204. What effect of disorder during prolonged time absorption of nutrients from intestine?

- A) Decreases body weight.
- B) Deficit of vitamins.
- C) Immunodeficit.
- D) All above mentioned.**

205. When can form hypersalivation?

- A) By fever.
- B) By activation sympatho- adrenal system.
- C) By action of parasympathomimetics.**

206. How can change evacuation of food by acidic gastritis from stomach in duodenum?

- A) Accelerated.
- B) Inhibited.**
- C) It is not changed.

207. How can influence stress on secretion stomach juice and its acidity?

- A) Increased secretion and acidity.
- B) Inhibited secretion and acidity.**
- C) Stimulated secretion and inhibited acidity.

208. Mark phenomenon achylia.

- A) Absence of hydrochloric acid.
- B) Absence proteolytic enzymes.
- C) Absence hydrochloric acid and proteolytic enzymes.**

209. What is main cause(reason) of stomach ulcer?

- A) Smoking.
- B) Alcohol.
- C) Helicobacter pillory.**

210. What reason does not influence on development of disbacteriosis?

- A) Disorder of peristalsis.
- B) Immunodeficiency state.
- C) Intensive treatment with antibiotics.
- D) **Hemolytic jaundice.**

Topic: Pathology of liver.

211. Disorder of what type metabolism by hepatocellular Insufficiency can lead to decrease arterial blood pressure?

- A) **Protein.**
- B) Carbohydrate.
- C) Lipid.
- D) Water-electrolyte.

212. What hormones can mobilize fat from fat depots?

- A) Insulin.
- B) **Contrinsular hormones.**
- C) Sexoides.

213. Why can form steatorrhea by hepatocellular insufficiency?

- A) Due to splitting fat in intestine.
- B) Due to absence of bile and release fat with excrement's.**

214. Why can form hypercholesterinemia by hepatocellular Insufficiency?

- A) Increase absorption cholesterol in intestine.
- B) Conversion cholesterol into steroid hormones.**
- C) Decrease release cholesterol with urine.

215. How can change quantity of albumines in the blood by Intensive hepatocellular insufficiency?

- A) Increase.
- B) Decrease.**
- C) It is not changed.

216. What plasma proteins will decrease first of all by hepato-cellular insufficiency?

- A) Alfa-globulins.
- B) Betta-globulins.
- C) Gamma-globulins.
- D) Albumins.**

217. How can change quantity of glucose in the blood by hepatocellular insufficiency?

- A) Increase.
- B) **Decrease.**
- C) It is not change.

218. How can change effects of hormones by hepatocellular insufficiency?

- A) **Increase.**
- B) Decrease.
- C) It is not change.

219. What cells can form bilirubin?

- A) Epithelium of kidneys.
- B) **Cells of reticulo-endothelial system.**
- C) Muscular.
- D) Nervous.

220. In what organ can form direct or conjugative bilirubin?

- A) Lungs.
- B) Muscles.
- C) **Liver.**
- D) Heart.

221. Itch or pruritus can form by hepatic and obturative jaundice (icterus) by:

- A) Decrease in the blood quantity of bile acids.
- B) Increase in the blood quantity of bile acids.**

222. Bradycardia by obturative jaundice can form due to:

- A) Increase intracranial pressure.
- B) Irritation of tissue receptors with bile acids.
- C) Reflectory influences from dilated Gall bladder.**
- D) Daniny-Ashner reflex.
- E) Chermak-Hering reflex.

223. What toxical substances are formed by hepatocellular Insufficiency due to disorder of carbohydrate metabolism:

- A) Ammonia.
- B) Valerian acid
- C) Acetoin and 2,3 butilenglicol.**

224. What acids in liver don't take part in inactivation toxic substances?

- A) Betta-oxybuthiric acid.**
- B) Glucuronic acid.
- C) Sulfuric acid.

225. How can change function of CNS by hepatic coma?

- A) Activation.
- B) **Inhibition.**
- C) It is not change.

226. Mark possible change acid-base balance by hepatic coma.

- A) **Development acidosis.**
- B) Development alkalosis.

Topic: Pathophysiology of kidneys.

227. In what section of nephron reabsorption of water is maximal?

- A) **Proximal.**
- B) Descending loop of Henle.
- C) Ascending loop of Henle.
- D) Collective tubules.

228. By what pathology in kidneys in final urine will be released big quantity of proteins?

- A) Chronic renal insufficiency.

- B) Acute renal insufficiency.
- C) Nephrotic syndrome.**

229. What is main cause of acute renal insufficiency?

- A) Inflammation.
- B) Fever.
- C) Shock.**

230. What type of acidosis can form by acute renal insufficiency?

- A) Metabolic acidosis.**
- B) Gas acidosis.

231. Mark hormone, which can stimulate reabsorption water in kidneys.

- A) ADH (antidiuretic hormone).**
- B) Aldosterone.
- C) Cortisol.
- D) Corticosterone.

232. How can change quantity of protein in the blood by nephrotic syndrome?

- A) It is not change.
- B) Increase.
- C) Decrease very intensively.**

233. Mark main mechanism of renal hypertension.

- A) Decrease synthesis of renin.
- B) Decrease release of aldosterone.
- C) Activation renin-angiotensin-aldosterone system.**

234. What is oliguria?

- A) Increase release of urine.
- B) Decrease diuresis.**
- C) Painful urination.

235. How can influence decrease oncotic pressure of the blood on glomerular filtration?

- A) Increase.**
- B) It is not influence.
- C) Decrease.

236. What is main reason (cause) of anemia by renal pathology?

- A) Hemolysis of erythrocytes.
- B) Decrease synthesis of erythropoietins.**
- C) Loss of Fe, Ni.

237. Hypercalcemia can form by chronic renal insufficiency due to surplus effect:

- A) Thyroxin.
- B) Parathyrine.**
- C) Glucagon.

238. What is main factor allow to develop oedema by nephrotic syndrome.

- A) Increase oncotic pressure in the blood.
- B) Decrease oncotic pressure in the blood.**
- C) Decrease permeability of blood vessels.

Topic: Pathophysiology of endocrine system.

a). Pathology of hypothalamus – hypophysis – adrenal system.

239. What is Simmonds disease?

- A) Hyperfunction of hypophysis.
- B) Total insufficiency of hypophysis.**
- C) Total hyperfunction of adrenal cortex.

240. What can develop by deficit of corticotrophin?

- A) Primary insufficiency of adrenal cortex.
- B) Secondary insufficiency of adrenal cortex.**

241. What syndrome can form(appear) by deficit of gonadotrophines.

- A) Adrenogenital syndrome.
- B) Adiposogenital syndrome.**

242. What effect is it necessary to wait by deficit of somatotrophines?

- A) Gigantic(ism).
- B) Hypothyroidism.
- C) Insufficiency of adrenal glands.
- D) Nanism (dwarfism).**

243. What hormones are released from cortex of adrenal glands?

- A) Liberines.
- B) Statines.
- C) Corticosteroides.**

244. What hormones are released from medulla substance of adrenal glands?

- A) Androgens.

B) Catecholamines.

C) Estrogens.

245. How can change level of glucose in the blood by insufficiency of adrenal glands?

A) Increase.

B) Decrease.

C) It is not change.

246. Mark reason of primary aldosteronism.

A) Tumor of glomerular zone cortex of adrenal glands.

B) Cardiac insufficiency.

C) Hepatocellular insufficiency.

247. Convulsions by primary aldosteronism can form due to:

A) Increase potassium in the blood.

B) Increase potassium in the muscles.

C) Decrease hydrogen ions.

248. How can change muscle tonus by adrenal glands insufficiency?

A) Increase.

B) It is not change.

C) Decrease.

249. Why can form striae and osteoporosis by hypercortisolism?

- A) Due to mobilization of glycogen.
- B) Due to mobilization of fat.
- C) Due to mobilization of endogenous proteins.**

250. What manifestations can appear by chronic insufficiency of adrenal glands (Addison disease)?

- A) Arterial hypertension.
- B) Black color of skin.**
- C) Increase sodium ions.
- D) Decrease potassium ions.

251. Mark symptoms Itsenko-Cushing disease.

- A) Hyperplasia of one adrenal gland.
- B) Hyperplasia of both (two) adrenal glands.**
- C) Low level of corticotrophin in the blood.

252. By what pathology can develop secondary aldosteronism?

- A) Aldosteroma of glomerular zone of adrenal glands.
- B) Quincke's edema.
- C) Hepatocellular insufficiency, cirrhosis.**

b) Topic: Pathophysiology of thyroid and parathyroid glands.

253. Is water-mineral metabolism by hyper functions of the parathyroid glands changed?

- A) **Yes.**
- B) Not.

254. Mark possible manifestations by hyperthyroidism.

- A) Decrease body temperature.
- B) Increase tissue breathing and body temperature.**
- C) Hypoglycemia.
- D) Obesity.

255. Mark manifestation by hypothyroid coma.

- A) Decrease tissue breathing.**
- B) Tachycardia.
- C) Increase body temperature.

256. How can change protein metabolism by increase function of thyroid gland?

- A) It is activated.
- B) It is disordered.**
- C) It is not change.

257. Intolerance to cold can appear by:

- A) Increase function of thyroid gland.
- B) Decrease function of thyroid gland.**
- C) Hypoparathyroidism.

258. When can form erythrocytosis?

- A) By decrease function of thyroid gland.
- B) By increase function of parathyroid glands.
- C) By increase function of thyroid gland.**

259. Mark endocrine gland by pathology of which can develop anemia.

- A) Parathyroid glands.
- B) Thyroid gland (hyperfunction).
- C) Thyroid gland (hypofunction).**
- D) Pancreas.

260. By what pathology of endocrine glands can form endogenic hyperthermia?

- A) Increase function of parathyroid glands.
- B) Increase function of thyroid gland.**
- C) Decrease function of thyroid gland.

261. What hormone can form in parathyroid glands?

- A) Calcitonin.
- B) **Parathyrin.**
- C) Thyroxin.

262. Why by hyperparathyroidism can form osteoporosis and tendency to fracture (break) of bones.

- A) Decrease calcium in the blood.
- B) **Mobilization calcium from bones.**
- C) Disorder of lipid metabolism.

263. Mark manifestations by hyperparathyroidism.

- A) Increase calcium ions and decrease phosphates in the blood.
- B) Calcinosis.
- C) Pain in muscles.
- D) Osteoporosis.
- E) Chronic renal insufficiency.
- F) **All above mentioned.**

c). Topic: Diabetes mellitus.

264. How insulin can influence on protein exchange?

- A) Inhibit synthesis.
- B) Stimulate synthesis.**
- C) Mobilize endogenic proteins.

265. How insulin can influence on lipid exchange?

- A) Stimulate lipolysis.
- B) Stimulate lipogenesis.**
- C) Stimulate gluconeogenesis.

266. Type 2 diabetes mellitus (insulin nondependent) can develop due to:

- A) Decrease sensitivity insulin receptors.**
- B) Increase sensitivity and quantity insulin receptors.

267. Decrease body weight by diabetes mellitus can form due to mobilization:

- A) Carbohydrates.
- B) Proteins.
- C) Lipids**

268. Disorder of what type metabolism by diabetes mellitus can stimulate formation microangiopathy?

- A) **Carbohydrate and protein.**
- B) Protein.
- C) Lipid.

269. Why by treatment patients with diabetes mellitus is recommended moderate physical loading?

- A) Stimulates reabsorption of glucose from intestine.
- B) Glucose is used for synthesis of glycogen.
- C) **Glucose intensive used in muscles.**

270. Mark process, which is not disorder of sensitivity.

- A) Pain.
- B) **Paresis.**
- C) Hyperesthesia.
- D) Anesthesia.

271. Why nervous dystrophy is considered as typical (standard) process?

- A) It has different etiology.
- B) It has different etiology and united(common) pathogenesis.**
- C) It can produce the same(similar) etiological factor.

272. Mark constitutional type of people, which can be predisposed to development neurosis.

- A) Sanguinnic.
- B) Melancholic.**
- C) Phlegmatic.

273. What process is not neurosis?

- A) Neurasthenia.
- B) Encephalitis.**
- C) Hysteria.

274. What does mean «anesthesia»?

- A) Decrease sensitivity.
- B) Absence temperature sensitivity.
- C) Absence all types sensitivity.**

275. When can form syndrome of «diafferentiation»?

- A) By cut locomotors nerve.
- B) By cut sensitive nerve.**

276. When can form syndrome of Braun-Secar?

- A) Complete cut of spinal cord.
- B) Damage medulla oblongata.
- C) Cut a half of spinal cord from left or right side.**

277. By damage of what section CNS can form bulbar paralysis?

- A) Cortex of the brain.
- B) Spinal cord.
- C) Hypothalamus.
- D) Medulla oblongata.**

278. What types of sensitivity are disordered by damage of thalamus?

- A) Tactile.
- B) All type of sensitivity on opposite side.**
- C) Only Pain.

279. How is named paralysis by damage motor neurons of spinal cord and locomotive nerves?

- A) Spastic.
- B) Cerebral.
- C) Atrophic (weak).**

280. Can appear hyper- or hypo kinesis by damage of extrapyramidal system?

- A) Yes.**
- B) Not.

281. What is base of spinal shock pathogenesis?

- A) Superiority processes of excitation in spinal cord.
- B) Superiority processes of inhibition in spinal cord.**

282. Is the depending manifestations of spinal shock on level of damage spinal cord?

- A) Yes.**
- B) Not.

283. Trophic function of nervous system supplies structure and function of cells and tissues due to:

- A) Regulation of metabolism.
- B) Regulation of blood circulation.
- C) Regulation of endocrine system.
- D) All above mentioned.**

284. How is changed quantity of catecholamines (adrenaline and noradrenaline) in the blood by extreme excitation and aggression?

- A) Decrease.
- B) Increase.**
- C) It is not change.

285. How can change quantity of catecholamines in the blood by depression?

- A) Increase.
- B) Decrease.**
- C) It is not change.

286. How psychic trauma does influence on secretion of stomach juice and its acidity?

- A) Increase secretion and decrease acidity.
- B) Inhibit secretion and decrease acidity.**
- C) Inhibit secretion and increase acidity.

FOR NOTES

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TESTS

FOR STUDENTS OF English Medium

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