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ПАТОЛОГИЧЕСКАЯ АНАТОМИЯ. ТЕСТОВЫЕ ЗАДАНИЯ

Пособие
для студентов учреждений высшего образования,
обучающихся по специальности «Лечебное дело» на английском языке

PATHOLOGICAL ANATOMY. MULTIPLE CHOICE QUESTIONS

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Авторы:
Г. В. Тищенко, Л. А. Шибанова, Д. А. Зиновкин, А. В. Мишин, А. С. Терешковец, И. П. Главацкая

Рецензенты:
кандидат медицинских наук, доцент,
начальник учреждения здравоохранения
«Витебское областное клиническое патологоанатомическое бюро»
С. В. Малашенко;

кафедра патологической анатомии и судебной медицины с курсом ФПК и ПК учреждения образования «Витебский государственный ордена Дружбы народов медицинский университет»

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Предназначено для студентов учреждений высшего образования, обучающихся по специальности 7-07-0911-01 «Лечебное дело».

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CONTENT

INTRODUCTION

Pathological anatomy occupies a central role in medical education, bridging basic science and clinical practice by elucidating the structural changes underlying disease processes. As a discipline, it provides the essential framework for comprehending the etiology, progression, and morphological manifestations of diseases, forming the cornerstone of diagnostic medicine. However, mastering pathological anatomy presents significant challenges due to its extensive scope and the necessity of correlating theoretical knowledge with real-world clinical scenarios. This manual addresses these challenges by offering a carefully structured collection of test questions designed to enhance comprehension, retention, and practical application.

Developed to support students in both general and systemic pathology courses, this guide serves as a tool for knowledge reinforcement, self-assessment, and the cultivation of diagnostic reasoning. The questions encompass core topics in pathological anatomy, ensuring thorough preparation for laboratory sessions, examinations, and future medical practice. By engaging with these materials, students can systematically strengthen their understanding of disease mechanisms and their morphological correlates.

Aligned with the standard curriculum for medical students, this manual draws upon the latest advancements in pathological anatomy, incorporating current research, clinical guidelines, and teaching methodologies from leading medical institutions. The content reflects modern diagnostic criteria and evidence-based practices, ensuring relevance in today's evolving medical landscape.

The test questions cover a broad spectrum of pathological processes – from fundamental principles to complex systemic diseases – with varying difficulty levels to accommodate different stages of learning. Topics include cellular injury, inflammation, neoplasia, and organ-specific pathologies, allowing students to progress from foundational concepts to advanced clinical correlations.

A distinctive feature of this manual is its emphasis on developing analytical skills essential for pathology and clinical medicine. Beyond rote memorization, the questions encourage critical thinking, pattern recognition, and the ability to synthesize morphological findings with clinical data – a crucial competency for future physicians.

Whether used for independent study or as a supplementary resource in lectures and tutorials, this manual offers a dynamic and effective approach to mastering pathological anatomy. By integrating self-assessment with active learning, it empowers students to build confidence, refine their diagnostic acumen, and excel in both academic and professional settings.

GENERAL PATHOLOGICAL ANATOMY

1. PARENCHYMAL INTRACELLULAR DEGENERATIONS

Choose one correct variant of answer

1. Specify the favorable outcome of "granular" dystrophy:
Variants of answer:
a) transformation into mucoid swelling;
b) hypotrophy of cell ultrastructures;
c) transformation into hyaline-droplet dystrophy;
d) transformation into hydropic dystrophy;
e) development of necrosis.

2. Specify the main pathogenetic mechanism of parenchymal dystrophy:
Variants of answer:
a) reduction of oxygen intake into the cell;
b) enhancement of cell functional activity;
c) reduction of synthetic processes in the cell;
d) enhancement of glycolytic processes in the cell;
e) energy deficit in the cell.

3. Give the definition of the term "dystrophy":
Variants of answer:
a) a disorder of metabolism leading to damage to cellular structures;
b) disruption of oxygen supply to cells and tissues;
c) local cell and tissue necrosis;
d) restoration of lost structures;
e) increased arterial blood flow to an organ.

4. Specify one of the manifestations of corneal dystrophy (keratosis):
Variants of answer:
a) mucoid swelling;
b) leukoplakia;
c) glycogenosis;
d) lipoidosis;
e) hyalinosis.

5. In the development of parenchymal fatty dystrophy in the heart, the following is observed:
Variants of answer:
a) enhancement of myocardial contractile ability;

b) no change in cardiac activity;
c) development of cardiac insufficiency;
d) improvement in the regulation of cardiac rhythm;
e) improvement in myocardial blood supply.

6. In hyaline-droplet dystrophy of the renal tubular epithelium, the following develops:

Variants of answer:
a) proteinuria;
b) oxaluria;
c) uraturia;
d) lipiduria;
e) phenylketonuria.

7. Name the pathomorphological (microscopic) change that characterizes hydropic dystrophy:

Variants of answer:
a) appearance of fat droplets in the cytoplasm;
b) appearance of protein droplets in cell cytoplasm resembling hyaline;
c) appearance of droplets in cell cytoplasm and interstitial tissue resembling horn substance;
d) appearance of vacuoles with transparent fluid in connective tissue fibers and interstitial tissue;
e) appearance of vacuoles with transparent fluid in cell cytoplasm.

8. The term "tiger heart" is used to refer to:

Variants of answer:
a) fatty dystrophy;
b) granular dystrophy;
c) hyaline-drop dystrophy;
d) hydropic dystrophy;
e) carbohydrate dystrophy.

9. Name the pathomorphological change that characterizes hyaline-droplet dystrophy:

Variants of answer:
a) appearance of granules in cell cytoplasm;
b) appearance of vacuoles in cell cytoplasm;
c) appearance of fat droplets in interstitial tissue;
d) appearance of large droplets of hyaline-like protein in cell cytoplasm;
e) appearance of large fat droplets in cell cytoplasm.

10. Specify the most common morphogenetic mechanism of parenchymal kidney dystrophy:

Variants of answer:

a) transformation;
b) abnormal synthesis;
c) decomposition;
d) infiltration;
e) sclerosis.

11. In the outcome of generalized corneal dystrophy (keratosis), the following develops:

Variants of answer:

a) addison's disease;
b) hyalinosis;
c) ichthyosis;
d) senile amyloidosis;
e) gaucher's disease.

12. The development of the following thesaurismosis is associated with a carbohydrate metabolism disorder:

Variants of answer:

a) phenylketonuria;
b) wilson disease;
c) gaucher's disease;
d) glycogen storage disease;
e) niemann-Pick disease.

13. Specify an unfavorable outcome of hydropic dystrophy:

Variants of answer:

a) focal coagulation necrosis;
b) focal liquefactive necrosis;
c) development of hyaline-drop dystrophy;
d) replacement of cytoplasm with lipids;
e) filling of cytoplasm with horny masses.

14. To detect parenchymal lipidosis, the staining method used is:

Variants of answer:

a) picrofuchsin mixture according to Van Gieson;
b) silver salt impregnation;
c) sudan III;
d) PAS reaction;
e) hematoxylin and eosin.

15. Foci of keratinization of multilayered flat non-keratinizing epithelium are called:

Variants of answer:

a) hyalinosis;
b) amyloidosis;
c) petrifactions;
d) leukoplakia;
e) dysplasia.

16. Parenchymal lipidosis is associated with a disorder of metabolism of:

Variants of answer:

a) cholesterol;
b) neutral fat;
c) hemoglobin;
d) cytoplasmic fat;
e) bilirubin.

17. Hydropic dystrophy is a manifestation of:

Variants of answer:

a) lipid metabolism disorder;
b) protein metabolism disorder;
c) calcium metabolism disorder;
d) copper metabolism disorder;
e) carbohydrate metabolism disorder.

18. Name a parenchymal dysproteinosis:

Variants of answer:

a) hyaline-droplet dystrophy;
b) amyloidosis;
c) fatty dystrophy;
d) hyalinosis;
e) carbohydrate dystrophy.

19. Specify one of the possible mechanisms of fat accumulation in cells during fatty dystrophy:

Variants of answer:

a) overfiltration;
b) transformation;
c) normal synthesis;
d) recomposition;
e) recanalization.

20. Hyaline-droplet dystrophy is characterized by:

Variants of answer:

a) most commonly develops in the brain;
b) increase in the volume of mitochondria;
c) appearance of inclusions in the form of protein drops in cell cytoplasm;
d) nucleus greatly enlarged;
e) alteration in water-salt metabolism.

21. The most common cause of myocardial fatty dystrophy is:

Variants of answer:

a) inflammation;
b) tumor growth;
c) hypoxia;
d) amyloidosis;
e) tissue edema.

22. Name the primary pathogenetic factor of dystrophy:

Variants of answer:

a) regeneration;
b) enzyme pathology;
c) trauma;
d) atrophy;
e) hypertrophy.

23. The development of hyaline-droplet dystrophy of renal tubular epithelium is based on:

Variants of answer:

a) nuclear breakdown;
b) hyperplasia of mitochondria;
c) denaturation of cytoplasmic proteins;
d) liquefactive necrosis;
e) chromatin condensation.

24. The following statements are true for fatty parenchymal dystrophy of the myocardium:

Variants of answer:

a) figurative name “tiger heart”;
b) myocardium appears clay-like in color;
c) transverse striation is visible on the endocardial side of the left ventricle;
d) the most common development mechanism is decomposition;
e) all answers are correct.

25. Specify a statement characterizing the concept of "dystrophy":

Variants of answer:

a) one of the types of cell damage;
b) general body reaction;
c) changes in organ volume;
d) unlimited cell proliferation;
e) local death.

26. Characteristics of corneal dystrophy include:

Variants of answer:

a) deposition of lime inside the cells;
b) excessive keratinization;
c) cell necrosis;
d) development of a tumor;
e) reduction in cell size.

27. Name the clinical manifestation of hyaline-droplet dystrophy of renal tubular epithelium:

Variants of answer:

a) anuria;
b) hypertension;
c) nephrotic syndrome;
d) hematuria;
e) oliguria.

28. Name the disease in which there is hydropic dystrophy of hepatocytes:

Variants of answer:

a) alcoholism;
b) cholelithiasis;
c) viral hepatitis;
d) cirrhosis;
e) liver necrosis.

29. The main mechanisms of the development of hydropic dystrophy of the kidneys include everything except:

Variants of answer:

a) disruption of water-electrolyte and protein metabolism;
b) alteration of colloid osmotic pressure inside the cell;
c) increased permeability of membranes;
d) hyperplasia of the nucleus;
e) activation of lysosomal hydrolytic enzymes.

30. Microscopic signs of myocardial fatty dystrophy include everything except:

Variants of answer:

a) dusty cell obesity;
b) large-droplet cell obesity;
c) hypertrophy of cardiomyocytes;
d) mitochondrial breakdown;
e) focal nature of changes.

31. Diseases associated with the development of fatty liver dystrophy include everything except:

Variants of answer:

a) fatty liver disease;
b) diabetes mellitus;
c) obesity;
d) influenza;
e) alcoholism.

32. Fatty dystrophy occurs as a result of:

Variants of answer:

a) infiltration;
b) perverted synthesis;
c) transformation;
d) decomposition;
e) all answers are correct.

33. Name a clinical manifestation of fatty dystrophy:

Variants of answer:

a) increased organ function;
b) reduced organ function;
c) elevated body temperature;
d) pallor of the skin;
e) maintenance of organ function.

34. Insufficiency of enzymes in a cell leads to:

Variants of answer:

a) tumors;
b) storage diseases;
c) rheumatic diseases;
d) diseases of the female reproductive organs;
e) traumatic diseases.

35. Parenchymal dysproteinoses include:

Variants of answer:

a) hyaline-droplet dystrophy;

b) mineral dystrophy;
c) amyloid dystrophy;
d) fibrinoid swelling;
e) mucoide swelling.

36. Parenchymal dystrophies develop as a result of:
Variants of answer:
a) phagocytosis;
b) paranecrosis;
c) pinocytosis;
d) autolysis;
e) decomposition.

37. Name the macroscopic signs of fatty liver dystrophy:
Variants of answer:
a) reduced size;
b) uneven surface;
c) flabby, yellowish appearance;
d) dense consistency;
e) organ deformation.

38. The outcome of hydropic dystrophy is:
Variants of answer:
a) transformation and mucoid swelling;
b) focal liquefactive necrosis;
c) transformation into hyalinosis;
d) regression;
e) transformation into corneal dystrophy.

39. Fatty dystrophy most commonly develops in the:
Variants of answer:
a) liver;
b) brain;
c) intestines;
d) bones;
e) spleen.

40. Characteristics of organs in fatty dystrophy include everything except:
Variants of answer:
a) increased size;
b) flabby consistency;
c) yellowish color;
d) organ dysfunction;
e) organ displacement.

41. All mechanisms of fatty dystrophy development in organs are true except:

Variants of answer:

a) in the kidney – infiltration;

b) in the myocardium – decomposition;

c) in the liver – infiltration;

d) in the myocardium – transformation;

e) all answers are incorrect.

42. Hydropic dystrophy of the epithelium of proximal and distal renal tubules is manifested by all of the following except:

Variants of answer:

a) changes in the epithelium of the main segments of the nephron – vacuolization;

b) nuclear condition – displacement toward the cell membrane;

c) the prevailing mechanism of development – infiltration;

d) the outcome of hydropic dystrophy – irreversibility of the process;

e) it is a morphological manifestation of nephrotic syndrome.

43. The color of the liver on section in fatty dystrophy is:

Variants of answer:

a) red;

b) bluish;

c) yellowish;

d) green;

e) beige.

44. Specify the outcome of hydropic dystrophy:

Variants of answer:

a) corneal dystrophy;

b) hyaline-droplet dystrophy;

c) focal coagulation necrosis;

d) focal liquefactive necrosis;

e) regression.

45. The most common site for the development of corneal dystrophy is the:

Variants of answer:

a) lungs;

b) skin;

c) liver;

d) heart;

e) stomach.

46. Disturbances in kidney function in hyaline-drop dystrophy of tubular epithelium are manifested as:

Variants of answer:

a) calciumuria;
b) phenylketonuria;
c) proteinuria;
d) oxaluria;
e) uraturia.

47. Depending on the type of metabolic disorder, the following types of dystrophies are distinguished, except:

Variants of answer:

a) protein;
b) fatty;
c) carbohydrate;
d) parenchymal;
e) mineral.

48. Characteristics of fatty dystrophy include:

Variants of answer:

a) appearance of protein drops in the cytoplasm;
b) reduction in cell size;
c) enhancement of cell function;
d) enlarged nuclei;
e) appearance of lipid vacuoles in the cytoplasm.

49. Name the predominant morphogenetic mechanisms of fatty dystrophy development in organs:

Variants of answer:

a) in the kidney – infiltration;
b) in the myocardium – decomposition;
c) in the liver – infiltration;
d) all answers are correct;
e) all answers are incorrect.

50. Specify the mechanism of fat accumulation in cells in obesity:

Variants of answer:

a) infiltration;
b) pinocytosis;
c) endocytosis;
d) parapexis;
e) decomposition.

51. A synonym for ballooning dystrophy is:
Variants of answer:
a) hyaline-droplet dystrophy;
b) focal liquefactive necrosis;
c) focal coagulation necrosis;
d) total cell necrosis;
e) corneal epithelial dystrophy.

52. Name the morphogenetic mechanism of protein dystrophies:
Variants of answer:
a) atrophy;
b) phagocytosis;
c) necrosis;
d) sclerosis;
e) fibrosis.

53. Give a characteristic of fatty liver dystrophy:
Variants of answer:
a) increased organ size;
b) fatty dystrophy at the periphery of liver lobules;
c) yellow color on section;
d) most common development mechanism in the liver is infiltration;
e) all answers are correct.

54. Specify the types of dystrophies based on localization:
Variants of answer:
a) local;
b) stromal-vascular;
c) isolated;
d) general;
e) localized.

55. Give a definition of the term "dystrophy":
Variants of answer:
a) local death;
b) the morphological expression of tissue metabolism disturbance;
c) change in organ volume;
d) a complex vascular-mesenchymal reaction of the body;
e) unlimited cell proliferation.

2. MESENCHYMAL DEGENERATIONS

Choose one correct variant of answer

1. Indicate the changes in organs in the case of general obesity:
Variants of answer:
a) fatty liver dystrophy;
b) brown atrophy of the liver;
c) brown induration of the lungs;
d) brown atrophy of the myocardium;
e) brown induration of the kidneys.

2. Choose the statement that is true for kwashiorkor:
Variants of answer:
a) fatty liver in the liver;
b) alipotropic obesity in the liver;
c) the predominant mechanism of dystrophy development is decomposition;
d) hydropic dystrophy developed in the liver;
e) hyaline-droplet dystrophy developed in the liver.

3. For arterial hypertension with predominant involvement of the brain and kidneys, all of the following are characteristic except:
Variants of answer:
a) arteriolosclerotic nephrosclerosis;
b) primarily shrunken kidneys;
c) hyalinosis in the arterioles of the kidneys and brain;
d) changes in arterioles and small arteries due to fibrinoid necrosis;
e) glomeruli in the kidneys are hyalinized, with some of them hypertrophied.

4. The following features are characteristic of mucoid swelling, except:
Variants of answer:
a) develops in blood vessel walls;
b) develops in organ stroma;
c) develops in case of croupous pneumonia;
d) reversible process;
e) characterized by the metachromasia phenomenon.

5. The following feature is characteristic of fibrinoid swelling:
Variants of answer:
a) develops in parenchymal cell;
b) develops in organ stroma, vessel walls;
c) never develops in rheumatic diseases;
d) reversible process;
e) characterized by the metachromasia phenomenon.

6. The following feature is characteristic of hyalinosis:
Variants of answer:
a) develops in parenchymal cells of organs;
b) often develops in myocardial infarction;
c) reversible process;
d) characterized by the metachromasia phenomenon;
e) has a widespread character in arterial hypertension and diabetes mellitus.

7. White (fatty) kidneys with a nodular surface are characteristic of:
Variants of answer:
a) arteriolosclerotic nephrosclerosis;
b) amyloidosis of the kidneys;
c) glomerulonephritis;
d) necrotic nephrosis;
e) primarily shrunken kidneys.

8. The most common cause of death in amyloidosis is:
Variants of answer:
a) chronic kidney failure;
b) chronic lung failure;
c) chronic enteric failure;
d) chronic cerebral failure;
e) chronic adrenal insufficiency.

9. The following macroscopic changes may be observed in generalized amyloidosis, except:
Variants of answer:
a) reduced kidney size;
b) enlarged kidney size;
c) reduced spleen size;
d) enlarged spleen size;
e) greasy sheen of the liver on section.

10. The morphological feature of heart changes in obesity is:
Variants of answer:
a) “tiger” heart;
b) fat tissue beneath the endocardium;
c) “hairy” heart;
d) adipose tissue beneath the epicardium;
e) valve insufficiency.

11. Specify the process that will ultimately lead to hyalinosis:
Variants of answer:
a) edema;

b) grainy dystrophy;
c) amyloidosis;
d) hyperpigmentation;
e) fibrinoid swelling.

12. The following staining method is used to detect amyloid in organs and tissues:

Variants of answer:
a) sudan III;
b) hematoxylin and eosin;
c) Congo red;
d) silver impregnation;
e) picric fuchsin staining by Van Gieson.

13. Systemic vascular hyalinosis develops in cases of:

Variants of answer:
a) abdominal typhoid;
b) arterial hypertension;
c) sepsis;
d) croupous pneumonia;
e) gastric ulcer.

14. The following staining method is used to demonstrate the metachromasia phenomenon:

Variants of answer:
a) thioflavines;
b) gentian violet;
c) toluidine blue;
d) picric fuchsin;
e) hematoxylin.

15. Name the morphological type of obesity:

Variants of answer:
a) alimentary;
b) hyperplastic;
c) cerebral;
d) symmetric;
e) upper.

16. Amyloid is not deposited in the following parts of the kidneys:

Variants of answer:
a) glomeruli;
b) in the tubules;
c) in the capsule;

d) in the stroma;
e) in the vessels.

17. Give the definition of stromal-vascular (mesenchymal) dysproteinoses:
Variants of answer:
a) manifestation of protein metabolism disorders in connective tissue;
b) manifestation of lipid metabolism disorders in connective tissue;
c) manifestation of protein metabolism disorders in cell cytoplasm;
d) manifestation of lipid metabolism disorders in cell cytoplasm;
e) manifestation of metabolic disorders in parenchyma and stroma of organs.

18. The macroscopic appearance of organs and tissues in mucoid swelling is:
Variants of answer:
a) enlarged, flabby;
b) enlarged, dense;
c) reduced, flabby;
d) reduced, dense, with fine-grained surface;
e) visually unchanged.

19. Hyalinosis of heart valves in rheumatism develops as a result of:
Variants of answer:
a) mucoid swelling;
b) amyloidosis;
c) hyaline-drop dystrophy;
d) fibrinoid swelling;
e) inflammation.

20. The basis of fibrinoid swelling is the following alteration of connective tissue:
Variants of answer:
a) edema;
b) accumulation of fat;
c) degradation of connective tissue fibers;
d) thickening of the ground substance;
e) sclerosis.

21. Name the type of hyalinosis by prevalence:
Variants of answer:
a) hyalinosis of connective tissue proper;
b) hyalinosis of blood vessels;
c) hyalinosis of the spleen capsule;
d) systemic hyalinosis;
e) hyalinosis of heart valves.

22. Specify the diseases in which fibrinoid swelling has a systemic character:

Variants of answer:

a) infectious diseases;
b) rheumatic diseases;
c) tumors;
d) obesity;
e) cachexia.

23. Indicate the changes in the kidneys caused by widespread arteriolar hyalinosis:

Variants of answer:

a) organ enlargement;
b) congestion;
c) shrinking and deformation of the organ;
d) infarction;
e) amyloidosis.

24. Specify the morphogenetic mechanisms of fibrinoid swelling:

Variants of answer:

a) resorption;
b) infiltration;
c) transformation;
d) perverted synthesis;
e) decompensation.

25. The classification of amyloidosis depending on causes and mechanisms of development, except:

Variants of answer:

a) idiopathic;
b) hereditary;
c) senile, tumor-related;
d) peri-reticular, peri-collagenous;
e) secondary.

26. Name the staining used to detect amyloid by the fluorescent method:

Variants of answer:

a) hematoxylin and eosin;
b) silver salt impregnation;
c) Congo red;
d) Schiff's iodine potassium iodide (IKI);
e) thioflavin T.

27. Amyloid is most commonly deposited in the organs in secondary amyloidosis, except:

Variants of answer:

a) spleen;
b) adrenal glands;
c) liver;
d) kidneys;
e) heart.

28. Indicate the process in the kidneys that leads to the development of uremia:

Variants of answer:

a) arteriolosclerotic nephrosclerosis;
b) diabetic nephrosclerosis;
c) renal amyloidosis;
d) atherosclerosis of renal arteries;
e) all answers are correct.

29. The morphogenetic stages of amyloidosis development are stated correctly, except:

Variants of answer:

a) pre-amyloid;
b) synthesis of amyloid fibrillar protein by amyloblasts;
c) formation of a plasma component;
d) aggregation of fibrils;
e) binding of fibrils with plasma glycoproteins and formation of amyloid.

30. Identify the substance whose metabolism is disrupted in stromal-vascular dyslipidoses:

Variants of answer:

a) cytoplasmic fat;
b) neutral cholesterol;
c) cholesterol and its esters;
d) cytoplasmic and neutral fat;
e) cytoplasmic cholesterol.

31. Morphological changes in cardiomyocytes in heart obesity:

Variants of answer:

a) contain fat inclusions;
b) hypertrophied;
c) contain protein inclusions;
d) unchanged;
e) compressed by lipocytes.

32. Name the type of general disorder of neutral fat metabolism:

Variants of answer:

a) atherosclerosis;
b) atherocalcinosis;
c) lipomatosis;
d) cachexia;
e) regional lipodystrophies.

33. Disruption of cholesterol metabolism is observed in the following disease:

Variants of answer:

a) rheumatism;
b) anemia;
c) tuberculosis;
d) atherosclerosis;
e) influenza.

34. Specify the alteration of connective tissue fibers characteristic of fibrinoid swelling:

Variants of answer:

a) sclerosis;
b) hyalinosis;
c) preserved;
d) argentophilic;
e) destruction.

35. Modern theory of amyloidosis:

Variants of answer:

a) viral;
b) allergic;
c) psychosomatic;
d) cellular local synthesis;
e) genetic.

36. Specify the ways of amyloid deposition in the body:

Variants of answer:

a) senile;
b) tumor-related;
c) primary;
d) peri-reticular, peri-collagenous;
e) secondary, primary.

37. The structure of amyloid at the electron microscopic level:

Variants of answer:

a) granular;
b) homogeneous;

c) fibrillar;
d) cellular;
e) in the form of deposits.

38. Features of idiopathic (primary) amyloidosis:
Variants of answer:
a) local nature of the process;
b) damage to different organs and systems;
c) more common than other types;
d) found in strictly defined geographical areas;
e) predisposition to certain ethnic groups.

39. Name the clinical syndrome characteristic of kidney amyloidosis:
Variants of answer:
a) obesity;
b) cachexia;
c) Cushing's syndrome;
d) hemorrhagic syndrome;
e) nephrotic syndrome.

40. Definition of stromal-vascular dystrophies:
Variants of answer:
a) manifestation of metabolism disorders in connective tissue;
b) manifestation of metabolism disorders in cell cytoplasm;
c) manifestation of metabolism disorders in parenchyma and stroma of organs;
d) manifestation of protein metabolism disorders in parenchyma and stroma of organs;
e) manifestation of lipid metabolism disorders in parenchyma and stroma of organs.

41. The main morphogenetic mechanism of mucoid swelling:
Variants of answer:
a) perverted synthesis;
b) infiltration;
c) decomposition;
d) transformation;
e) resorption.

42. Outcome of mucoid swelling:
Variants of answer:
a) transforms into amyloidosis;
b) irreversible;
c) transforms into fibrinoid swelling;
d) transforms into hyalinosis;
e) transforms into mucoid swelling.

43. Local hyalinosis develops as a result of:

Variants of answer:

a) amyloidosis;
b) fatty degeneration;
c) horny degeneration;
d) sclerosis;
e) mucoid swelling.

44. Name the alteration of connective tissue fibers characteristic of fibrinoid necrosis:

Variants of answer:

a) degradation of connective tissue fibers;
b) carbohydrate transformation;
c) reduced vessel permeability;
d) hyalinosis;
e) amyloidosis.

45. For the second stage of acquired splenic amyloidosis, everything is characteristic except:

Variants of answer:

a) spleen is not enlarged;
b) spleen is significantly enlarged;
c) amyloid in the white pulp;
d) amyloid in the red pulp;
e) amyloid deposits along the course of reticular fibers.

46. Name the morphogenetic mechanism of amyloidosis:

Variants of answer:

a) resorption;
b) infiltration;
c) transformation;
d) decomposition;
e) abnormal synthesis.

47. Name the types of obesity based on the mechanisms of development:

Variants of answer:

a) alimentary, metabolic;
b) lipomatosis;
c) cerebral, endocrine;
d) upper, middle;
e) lower, symmetrical.

48. Specify the diseases in which cachexia may develop:

Variants of answer:

a) atherosclerosis;

b) arterial hypertension;
c) ischemic heart disease;
d) acute pneumonias;
e) malignant neoplasms.

49. Specify the mechanism of cholesterol deposition in the intima of the aorta in atherosclerosis:

Variants of answer:
a) phagocytosis;
b) infiltration;
c) transformation;
d) denaturation;
e) perverted synthesis.

50. Cholesterol can be detected in the aortic intima using the following staining:

Variants of answer:
a) hematoxylin and eosin;
b) Schiff's iodine potassium iodide (IKI) reaction;
c) picric fuchsin;
d) sudan III;
e) Congo red.

51. Name the type of stromal-vascular dysproteinosis:

Variants of answer:
a) mucoid swelling;
b) horny degeneration;
c) fibrinous inflammation;
d) hyaline-drop dystrophy;
e) mucoid swelling.

52. Specify the morphogenetic mechanism of development of stromal-vascular dystrophies:

Variants of answer:
a) reduction of membrane potential;
b) hypersecretion;
c) transformation;
d) hyposecretion;
e) resorption.

53. Specify the characteristic alteration of connective tissue in mucoid swelling:

Variants of answer:
a) reduced permeability;

b) splitting of elastic fibers;
c) redistribution and accumulation of glycosaminoglycans;
d) thickening of collagen fibers;
e) accumulation of fat.

54. Hyalinosis of the spleen capsule develops as a result of:
Variants of answer:
a) inflammation;
b) sclerosis of the capsule;
c) plasmorrhagia;
d) fibrinoid necrosis in the walls of splenic blood vessels;
e) hyaline-drop dystrophy.

55. Hyaline is:
Variants of answer:
a) cartilage;
b) glycosaminoglycan;
c) fibrillar protein containing immune complexes and lipids;
d) fibrillar protein containing iron;
e) fibrillar protein containing amyloid.

56. List the types of vascular hyaline:
Variants of answer:
a) mixohyalin;
b) simple;
c) complex;
d) lipohyalin;
e) correct answers b, c, d.

57. Specify the type of metabolism disorder leading to stromal-vascular dystrophies:
Variants of answer:
a) mixed;
b) mineral;
c) fatty;
d) water-electrolyte;
e) enzymatic.

58. Fibrinoid swelling is preceded by the following type of dystrophy:
Variants of answer:
a) mucoid swelling;
b) amyloidosis;
c) mucoid swelling;
d) hyaline-drop dystrophy;
e) hyalinosis.

59. Name the types of amyloid fibrillar proteins:

Variants of answer:

a) AF-amyloid;
b) ASC1-amyloid;
c) AA-amyloid;
d) AL-amyloid;
e) all answers are correct.

60. The development of amyloidosis can be complicated by the following diseases except:

Variants of answer:

a) arterial hypertension;
b) multiple myeloma;
c) chronic lung abscess;
d) chronic trophic ulcers;
e) bronchiectasis.

61. The types of amyloidosis, depending on the predominance of involvement of various organs and systems, include all except:

Variants of answer:

a) nephropathic;
b) cardiopathic;
c) neuropathic;
d) cachectic;
e) encephalopathic.

62. Specify the typical localization of amyloid in the splenic pulp:

Variants of answer:

a) in the red pulp;
b) in the white pulp;
c) in the intima of blood vessels;
d) in both red and white pulp;
e) in the adventitia of blood vessels.

63. Specify the characteristic feature of renal amyloidosis:

Variants of answer:

a) small, dense kidneys with a finely granular surface;
b) large, fatty kidneys;
c) amyloid is deposited in the capsule;
d) amyloid is deposited in the epithelium of the tubules;
e) amyloid is deposited in the renal calyces.

64. Specify the main localization of stromal-vascular lipidoses:

Variants of answer:

a) fat depots;

b) stroma of organs;
c) parenchyma of organs;
d) capsule of organs;
e) walls of large blood vessels.

65. The main cause of death in heart obesity is:
Variants of answer:
a) rupture of the left ventricle;
b) arrhythmia;
c) atrial fibrillation;
d) myocardial infarction;
e) chronic heart failure.

66. Name the type of local disorder of neutral fat metabolism:
Variants of answer:
a) atherosclerosis;
b) lipomatosis;
c) obesity;
d) regional lipodystrophies;
e) cachexia.

67. The characteristic alteration of the aorta in atherosclerosis is:
Variants of answer:
a) smooth, pale-gray, shiny intima;
b) intima with yellow spots, stripes, and plaques;
c) carbohydrate deposits in the intima;
d) bilirubin deposits in the intima;
e) neutral fat deposits in the middle layer of the aorta.

68. Specify stromal-vascular dysproteinoses that can be sequential stages of connective tissue disorganization:
Variants of answer:
a) mucoid swelling, amyloidosis;
b) mucoid swelling, fibrinoid swelling, hyalinosis;
c) mucoid swelling, amyloidosis;
d) hyaline-drop dystrophy, amyloidosis;
e) mucoid swelling, granular swelling, hyalinosis.

69. For mucoid swelling, the following is characteristic:
Variants of answer:
a) degradation of collagen fibers;
b) sclerosis of elastic fibers;
c) appearance of protein grains in the cytoplasm;
d) redistribution and accumulation of glycosaminoglycans;
e) redistribution and accumulation of cholesterol and its esters.

70. The main morphogenetic mechanism of hyalinosis development is:

Variants of answer:

a) resorption;
b) decomposition;
c) reduction of cell membrane potential;
d) perverted synthesis;
e) transformation.

71. Morphological characteristics of a primary wrinkled kidney (arteriolosclerosis):

Variants of answer:

a) large, flabby, with a smooth surface;
b) small, dense, with a smooth surface;
c) small, dense, with a finely granular surface;
d) develops as a result of atherosclerosis of the renal artery;
e) develops as a result of mucoid swelling.

72. The main theory of amyloidosis pathogenesis:

Variants of answer:

a) immune;
b) viral-genetic;
c) cellular local synthesis;
d) polyetiological;
e) modification.

73. Name a component of amyloid:

Variants of answer:

a) fat;
b) starch;
c) fibrillar protein-F-component;
d) potassium;
e) water, mineral salts.

74. The macroscopic diagnostic method for amyloidosis during autopsy:

Variants of answer:

a) thioflavin T;
b) iodine solution staining;
c) Congo red;
d) gentian violet;
e) hematoxylin and eosin.

75. In senile amyloidosis, the following organs and systems are most commonly affected, except:

Variants of answer:

a) heart;

b) arteries;
c) pancreas;
d) veins;
e) brain.

76. Name the types of obesity depending on the predominant localization of fat deposition:

Variants of answer:
a) alimentary, metabolic;
b) lipomatosis;
c) cerebral, endocrine;
d) lipodystrophy;
e) lower, symmetrical.

77. Cachexia develops with a disturbance in the metabolism of:

Variants of answer:
a) proteins;
b) neutral fat;
c) cholesterol and its esters;
d) mucoproteins;
e) lipoproteins.

78. Hyalinosis can develop as a result of:

Variants of answer:
a) hydropic swelling;
b) amyloidosis;
c) granular dystrophy;
d) plasmorrhagia;
e) keratosis.

79. Macroscopic changes in the kidneys in diffuse arteriolar hyalinosis:

Variants of answer:
a) sharp increase in organ size;
b) congestion;
c) shrinkage and deformation of the organ;
d) infarction;
e) capsule rupture.

80. Outcome of plasma impregnation:

Variants of answer:
a) transition to amyloidosis;
b) keratinization;
c) transition to fibrinoid swelling;
d) transition to hyalinosis;
e) transition to mucoid swelling.

81. For the diagnosis of secondary amyloidosis, a biopsy is performed on:
Variants of answer:
a) gum mucosa;
b) rectal mucosa;
c) kidneys;
d) all answers are correct;
e) all answers are incorrect.

82. The following type of amyloidosis develops in periodic disease:
Variants of answer:
a) primary;
b) secondary;
c) hereditary;
d) tumor-like;
e) senile.

83. Macroscopic characteristics of the heart in obesity:
Variants of answer:
a) enlarged size due to myocardium;
b) enlarged size due to fat deposits;
c) enlarged size due to pericardium;
d) fat in cardiomyocytes;
e) increased contractile capacity of the myocardium.

84. Xanthoma cells can be detected using:
Variants of answer:
a) hematoxylin and eosin;
b) periodic acid-Schiff (PAS) reaction;
c) Congo red;
d) sudan III;
e) Van Gieson's picric fuchsin mixture.

85. Specify diseases in which cachexia most frequently develops:
Variants of answer:
a) atherosclerosis;
b) arterial hypertension;
c) ischemic heart disease;
d) chronic infections;
e) acute pneumonia.

3. MIXED DEGENERATIONS

Choose one correct variant of answer

1. Specify the localization of metabolism disorders in mixed dystrophies:
Variants of answer:
a) in the parenchyma;
b) in the stroma;
c) in the parenchyma and stroma;
d) intracellularly;
e) extracellularly.

2. Mixed dystrophies occur with a disturbance in the metabolism of:
Variants of answer:
a) cholesterol;
b) complex proteins and minerals;
c) glucose;
d) glycogen;
e) phenylalanine.

3. Specify the groups of endogenous pigments:
Variants of answer:
a) hemoglobinogenic;
b) proteinogenic;
c) lipidogenic;
d) all answers are correct;
e) all answers are incorrect.

4. Specify the hemoglobinogenic pigment formed in the norm:
Variants of answer:
a) hematoidin;
b) hemin;
c) hemosiderin;
d) vitamin E deficiency pigment;
e) porphyrin.

5. Specify the hemoglobinogenic pigment formed in pathology:
Variants of answer:
a) hematoidin;
b) ferritin;
c) hemosiderin;
d) bilirubin;
e) adrenochrome.

6. Specify the hemoglobinogenic pigment containing iron:
Variants of answer:
a) hematoidin;
b) ferritin;
c) adrenochrome;
d) bilirubin;
e) porphyrin.

7. Specify the hemoglobinogenic pigments that do not contain iron:
Variants of answer:
a) bilirubin;
b) porphyrin;
c) hematoidin;
d) all answers are correct;
e) all answers are incorrect.

8. The pathogenic action of ferritin:
Variants of answer:
a) vasoparalytic;
b) hypertensive;
c) stimulates collagenosis;
d) neuropathic;
e) coagulopathic.

9. The Perl's reaction is used to detect:
Variants of answer:
a) bilirubin;
b) hemosiderin;
c) apo-ferritin;
d) hematoidin;
e) sulphohematin.

10. Ferritin depots are normal in all of the following organs except:
Variants of answer:
a) liver;
b) lymph nodes;
c) ovaries;
d) spleen;
e) red bone marrow.

11. Cells in which ferritin is formed are called:
Variants of answer:
a) histiocytes;

b) monocytes;
c) macrophages;
d) sideroblasts;
e) siderophages.

12. Excessive formation of hemosiderin is called:
Variants of answer:
a) hemolytic anemia;
b) hemosiderosis;
c) hepatolenticular degeneration;
d) hemomelanosis;
e) hemochromatosis.

13. Name the cause of generalized hemosiderosis:
Variants of answer:
a) intravascular hemolysis;
b) extravascular hemolysis;
c) disorder of porphyrin metabolism;
d) impaired bile flow;
e) cholestasis.

14. Name the disease in which generalized hemosiderosis occurs:
Variants of answer:
a) cirrhosis of the liver;
b) glomerulonephritis;
c) hemolytic anemias;
d) pulmonary hypertension;
e) heart defects.

15. Specify the main organs where hemosiderin accumulates in generalized hemosiderosis:
Variants of answer:
a) in the kidneys, ovaries, uterus;
b) in the liver, spleen, bone marrow;
c) in the lungs, heart, kidneys;
d) in the stomach, intestines;
e) in the brain and spinal cord.

16. Name the cause of local hemosiderosis:
Variants of answer:
a) intravascular hemolysis;
b) extravascular hemolysis;
c) disorder of porphyrin metabolism;

d) cholestasis;
e) biliary stasis.

17. Name the pathological condition in which local hemosiderosis occurs:
Variants of answer:
a) hemolytic anemia;
b) hematoma of the brain;
c) malaria;
d) hemochromatosis;
e) poisoning with hemolytic toxin.

18. Specify the disease in which hemosiderosis of the lungs occurs:
Variants of answer:
a) in hemolytic anemia;
b) in chronic bronchitis;
c) in pulmonary tuberculosis;
d) in rheumatic mitral valve disease;
e) in chronic abdominal aortic aneurysm.

19. Name the appearance of the lungs in hemosiderosis:
Variants of answer:
a) areas of lung tissue breakdown;
b) dense and brown;
c) resembling honeycombs and dense;
d) cherry-colored and dense;
e) increased airiness.

20. The localization of sideroblasts and siderophages in the lung parenchyma in hemosiderosis of the lungs is determined in all structures except:
Variants of answer:
a) alveolar lumens;
b) bronchiole lumens;
c) bronchial lumens;
d) perivascular tissue and lung stroma;
e) parietal pleura.

21. The color to which hemosiderin granules stain in the Perl's reaction:
Variants of answer:
a) red;
b) orange;
c) azure;
d) maroon;
e) black.

22. In the foci of diapedetic hemorrhages, you can find:
Variants of answer:
a) hemosiderin;
b) hemin;
c) hemomelanin;
d) porphyrin;
e) hematoidin.

23. Name the types of jaundice based on the mechanism of development:
Variants of answer:
a) hepatic;
b) subhepatic;
c) suprahepatic;
d) all answers are correct;
e) all answers are incorrect.

24. Hemosiderosis of the liver occurs in:
Variants of answer:
a) general hemosiderosis;
b) hepatic jaundice;
c) subhepatic jaundice;
d) fatty liver;
e) hemolytic jaundice.

25. The localization of hemosiderin in the liver in hemosiderosis is in:
Variants of answer:
a) capsule;
b) Kupffer cells;
c) portal vein;
d) lipocytes;
e) none of the listed structures.

26. Subhepatic jaundice is associated with:
Variants of answer:
a) hemolysis of red blood cells;
b) impairment of bilirubin conjugation with glucuronic acid;
c) impairment of bile outflow from the liver;
d) porphyrin metabolism disorder;
e) hemochromatosis.

27. Subhepatic jaundice can occur in:
Variants of answer:
a) viral hepatitis;

b) gallstone disease;
c) general hemosiderosis;
d) congenital porphyria;
e) malaria.

28. Name the pigment that gives a bronze skin color in Addison's disease:
Variants of answer:
a) bilirubin;
b) lipochrome;
c) ceroid;
d) melanin;
e) biliverdin.

29. Define the term "mixed dystrophies":
Variants of answer:
a) disturbance of metabolic exchange in the parenchyma of organs;
b) disturbance of metabolic exchange in the stroma of organs;
c) disturbance of protein and carbohydrate metabolism;
d) disturbance of complex protein and mineral metabolism in the parenchyma and stroma of organs;
e) disturbance of protein and lipid metabolism.

30. Brown induration of the lungs is characterized by:
Variants of answer:
a) hemosiderosis;
b) hemorrhages;
c) lipofuscinosis;
d) melanosis;
e) hemomelanosis.

31. Name the pigment responsible for the color of the lungs in brown induration:
Variants of answer:
a) bilirubin;
b) hemosiderin;
c) hematin;
d) melanin;
e) lipofuscin.

32. Name the pigment formed in the center of a hematoma:
Variants of answer:
a) bilirubin;
b) hematoidin;

c) hemosiderin;
d) ferritin;
e) hematin.

33. Name the pigment detected in the base of erosion of the gastric mucosa:
Variants of answer:
a) hemosiderin;
b) sulphohematin;
c) ferritin;
d) bilirubin;
e) lipofuscin.

34. List the processes that lead to the development of local hemosiderosis:
Variants of answer:
a) intravascular hemolysis;
b) petechial hemorrhages;
c) hematoma formation;
d) diapedetic hemorrhages;
e) all answers are correct.

35. Name the pigment formed in hemolytic anemia:
Variants of answer:
a) formalin pigment;
b) bilirubin;
c) hemomelanin;
d) lipofuscin;
e) sulphohematin.

36. Name the pigment belonging to hematin:
Variants of answer:
a) bilirubin;
b) malarial pigment;
c) biliverdin;
d) adrenochrome;
e) ceroid.

37. Name the pigment that is produced in excess in malarial coma:
Variants of answer:
a) lipochrome;
b) porphyrin;
c) hemomelanin;
d) lipofuscin;
e) ceroid.

38. Specify the type of porphyria:
Variants of answer:
a) local;
b) general;
c) congenital;
d) intravascular;
e) extravascular.

39. Proteinogenic pigments include:
Variants of answer:
a) melanin;
b) adrenochrome;
c) pigment of enterochromaffin cells' granules;
d) all answers are correct;
e) all answers are incorrect.

40. Name the tissue in which melanocytes and melanophages are not found:
Variants of answer:
a) epidermis;
b) dermis;
c) iris of the eye;
d) retina of the eye;
e) cardiac muscle stroma.

41. Type of melanosis by prevalence:
Variants of answer:
a) congenital;
b) acquired;
c) local;
d) vascular;
e) systemic.

42. Type of melanosis depending on the cause:
Variants of answer:
a) idiopathic;
b) acquired;
c) local;
d) primary;
e) secondary.

43. Name the disease in which widespread melanosis is not observed:
Variants of answer:
a) albinism;

b) Addison's disease;
c) melanoma;
d) nevus;
e) Graves' disease.

44. Name the hormone involved in the development of melanoderma in Addison's disease:

Variants of answer:
a) corticosteroids (excess);
b) corticosteroids (deficiency);
c) adrenocorticotropic hormone (ACTH);
d) glucagon;
e) insulin.

45. Specify the type of local melanosis:

Variants of answer:
a) leukoderma;
b) nevus;
c) tanning;
d) vitiligo;
e) Addison's disease.

46. Name the changes associated with the weakening or disappearance of pigmentation:

Variants of answer:
a) albinism;
b) leukoderma;
c) vitiligo;
d) all answers are correct;
e) all answers are incorrect.

47. Name the acquired disease in which widespread melanosis develops:

Variants of answer:
a) albinism;
b) Addison's disease;
c) melanoma;
d) nevus;
e) Graves' disease.

48. The development of Addison's disease occurs with the involvement of:

Variants of answer:
a) the brain;
b) ovaries;

c) adrenal glands;
d) stomach;
e) liver.

49. Melanin is formed from:
Variants of answer:
a) phenylalanine;
b) cholesterol;
c) tyrosine;
d) ceroid;
e) myelin.

50. Name the pigment that belongs to the group of lipogenic pigments:
Variants of answer:
a) adrenochrome;
b) lipofuscin;
c) hemosiderin;
d) porphyrin;
e) pigment of enterochromaffin cells' granules.

51. Name the stage of lipofuscin formation in a cell:
Variants of answer:
a) stage of lipofuscin formation;
b) stage of old lipofuscin;
c) stage of mature lipofuscin;
d) stage of ceroid formation;
e) stage of geluchrom formation.

52. Type of lipofuscinosis depending on the cause:
Variants of answer:
a) undefined;
b) secondary;
c) idiopathic;
d) widespread;
e) local.

53. Brown atrophy of the myocardium is characterized by:
Variants of answer:
a) enlargement of the heart;
b) epicardial proliferation of adipose tissue;
c) presence of hemosiderin in cardiomyocytes;
d) reduction in heart volume and mass;
e) accumulation of adrenochrome in cardiomyocytes.

54. Localization of lipofuscin in the liver:

Variants of answer:

a) in hepatocytes;
b) in stromal cells;
c) in the lumen of sinusoids;
d) in the vascular wall;
e) in bile capillaries.

55. In brown atrophy of parenchymatous organs, one of the following pigments accumulates:

Variants of answer:

a) ceroid;
b) hemosiderin;
c) lipofuscin;
d) melanin;
e) hematoporphyrin.

56. Macroscopic characteristics of brown atrophy of the liver:

Variants of answer:

a) the liver is reduced in size, the tissue is clay-like in appearance;
b) the liver is reduced in size, the tissue is brown, the margin is leathery;
c) the liver is enlarged, the tissue is brown;
d) lipochrome accumulates in hepatocytes;
e) hemosiderin accumulates in hepatocytes.

57. In the cells of skeletal muscle in cachexia, there is an accumulation of:

Variants of answer:

a) hemosiderin;
b) gelanin;
c) ferritin;
d) lipofuscin;
e) hypochrome.

58. Name the disease in which there is no disturbance of nucleoprotein metabolism:

Variants of answer:

a) malaria;
b) gout;
c) uric acid diathesis;
d) urinary stone disease;
e) uric acid infarction.

59. Name the substances that make up nucleoproteins:

Variants of answer:

a) protein, glycosaminoglycans;
b) protein, DNA, RNA;
c) protein, potassium;
d) protein, lipofuscin;
e) protein, porphyrin.

60. The following changes lead to the development of gout:

Variants of answer:

a) precipitation of uric acid and its salts in tissues;
b) hyperuricemia;
c) hyperuricosuria;
d) all answers are correct;
e) all answers are incorrect.

61. Specify the tissue changes that occur in response to the precipitation of uric acid salts in gout:

Variants of answer:

a) necrosis;
b) productive inflammation;
c) sclerosis;
d) all answers are correct;
e) all answers are incorrect.

62. Name the organ where calcium is deposited:

Variants of answer:

a) parathyroid glands;
b) bones;
c) kidneys;
d) large intestine;
e) liver.

63. Name the organs that participate in the excretion of calcium from the body:

Variants of answer:

a) sweat glands;
b) bone marrow;
c) colon;
d) lungs;
e) parathyroid glands.

64. Name the hormone that regulates calcium metabolism in the body:

Variants of answer:

a) insulin;

b) adrenocorticotropic hormone;

c) PTH;

d) calcitonin;

e) glucagon.

65. Calcium can be detected in tissues using one of the following histochemical methods:

Variants of answer:

a) PAS reaction;

b) Grimelius reaction;

c) Von Kossa's method;

d) Van Gieson's stain;

e) Perl's reaction.

66. Name the forms of calcification depending on the mechanism of occurrence:

Variants of answer:

a) metastatic;

b) metabolic;

c) dystrophic;

d) all answers are correct;

e) all answers are incorrect.

67. The level of calcium in the blood with metastatic calcification:

Variants of answer:

a) unchanged;

b) lowered;

c) increased;

d) fluctuates;

e) constant.

68. The level of calcium in the blood with metabolic calcification:

Variants of answer:

a) unchanged;

b) lowered;

c) increased;

d) fluctuates;

e) hyperkalemia.

69. The level of calcium in the blood with dystrophic calcification:

Variants of answer:

a) unchanged;
b) lowered;
c) increased;
d) fluctuates;
e) constant.

70. Most commonly, in metastatic calcification, calcium salts are deposited in organs, except for:

Variants of answer:

a) lungs;
b) stomach walls;
c) kidneys;
d) myocardium;
e) brain.

71. Ultrastructural localization of primary calcium deposits in the myocardium and kidneys in metastatic calcification:

Variants of answer:

a) endoplasmic reticulum;
b) mitochondria;
c) Golgi apparatus;
d) cell nuclei;
e) cell membranes.

72. Characteristics of dystrophic calcification:

Variants of answer:

a) a local process;
b) calcium is deposited in areas of necrosis and dystrophy;
c) calcium is deposited in areas of sclerosis;
d) all answers are correct;
e) all answers are incorrect.

73. Mechanism of development of calcareous metastases:

Variants of answer:

a) lowering of blood calcium levels;
b) deposition of calcium salts in necrotic tissues;
c) increase in blood calcium levels;
d) deposition of calcium salts in areas of sclerosis;
e) calciphylaxis.

74. The development of rickets is based on a disturbance in the metabolism of:

Variants of answer:

a) sodium;
b) copper;
c) phosphorus;
d) potassium;
e) iron.

75. Name the cause of rickets:

Variants of answer:

a) hypercalcemia;
b) hypophosphatemia;
c) deficiency of vitamin D;
d) excess of vitamin D;
e) deficiency of vitamin A.

76. Name the cause of rickets in pregnant women:

Variants of answer:

a) deficiency of ultraviolet radiation;
b) low intake of vitamin D with food;
c) impaired absorption of vitamin D in the intestine;
d) increased consumption of vitamin D with normal intake;
e) excess ultraviolet radiation.

77. In the gallbladder, stones of the following chemical composition can form:

Variants of answer:

a) urates;
b) oxalates;
c) phosphates;
d) phleboliths;
e) calcium.

78. Name the changes that can occur due to the presence of stones in the kidneys:

Variants of answer:

a) tuberculosis;
b) hydronephrosis;
c) kidney cancer;
d) polycystic kidney disease;
e) primary contracted kidney.

79. Specify the composition of stones that can form in the urinary tract:
Variants of answer:
a) calcium;
b) urates;
c) oxalates;
d) phosphates;
e) all answers are correct.

80. Name the disease that is primarily caused by a disturbance in copper metabolism:
Variants of answer:
a) Gaucher's disease;
b) hemochromatosis;
c) Wilson-Konovalov disease;
d) melanosis;
e) Girke's disease.

81. Name the disease in which hypokalemia develops:
Variants of answer:
a) Addison's disease;
b) periodic paralysis;
c) Wilson-Konovalov disease;
d) Gaucher's disease;
e) tuberculosis.

4. NECROSIS, APOPTOSIS

Choose one correct variant of answer

1. Definition of the concept "necrosis":
Variants of answer:
a) organ hypoxia;
b) dystrophy;
c) organism death;
d) hyperemia;
e) necrosis of tissues in a living organism.

2. Name the stages of the necrotic process:
Variants of answer:
a) paranecrosis;
b) necrobiosis;
c) cell death;

d) autolysis;
e) all answers are correct.

3. Definition of the concept "necrobiosis":
Variants of answer:
a) one of the stages of necrosis;
b) autolysis;
c) reversible dystrophic changes;
d) irreversible dystrophic processes;
e) pathobiosis.

4. Definition of the concept "paranecrosis":
Variants of answer:
a) one of the stages of hyalinosis;
b) necrobiosis stretched over time;
c) similar to dystrophic changes but reversible;
d) autolytic tissue melting;
e) cell and tissue death in a living organism.

5. Definition of the concept "autolysis":
Variants of answer:
a) one of the stages of necrosis;
b) irreversible dystrophic processes;
c) decomposition of dead substrate by hydrolytic enzymes;
d) necrobiosis stretched over time;
e) cell death.

6. Name an enzyme involved in the autolysis of the cell nucleus:
Variants of answer:
a) acid phosphatase;
b) DNase (deoxyribonuclease);
c) alkaline phosphatase;
d) cytochrome oxidase;
e) transferase.

7. Specify the cell's ultrastructure that facilitates autolytic enzymatic processes within the cell:
Variants of answer:
a) Golgi apparatus;
b) mitochondria;
c) lysosomes;
d) endoplasmic reticulum;
e) microsomes.

8. Type of necrosis developing from the influence of low and high temperatures:

Variants of answer:

a) indirect;
b) toxic;
c) trophoneurotic;
d) direct;
e) vascular.

9. Specify a type of indirect necrosis:

Variants of answer:

a) vascular;
b) toxic;
c) traumatic;
d) wound;
e) burn.

10. Specify a form of direct necrosis:

Variants of answer:

a) vascular;
b) ischemic;
c) traumatic;
d) allergic;
e) trophoneurotic.

11. Specify the causes of direct necrosis:

Variants of answer:

a) nerve damage;
b) cessation of blood flow;
c) action of acids, toxins;
d) sensitization of the organism;
e) formation of immune complexes.

12. The causes of indirect necrosis include everything except:

Variants of answer:

a) actions of physical factors;
b) vessel thrombosis;
c) obstruction of a vessel by an embolus;
d) compression of a vessel by a tumor node;
e) immediate-type hypersensitivity reactions.

13. Specify etiological types of necrosis:

Variants of answer:

a) toxic;

b) vascular;
c) traumatic;
d) all answers are correct;
e) all answers are incorrect.

14. Name a microscopic sign of cell nucleus necrosis:
Variants of answer:
a) heterolysis;
b) pyknosis, karyolysis;
c) karyokinesis;
d) swelling of mitochondria;
e) thickening of nuclear membrane.

15. Changes in the stroma of an organ during necrosis:
Variants of answer:
a) ischemia;
b) hyalinosis;
c) amyloidosis;
d) fibrinoid necrosis;
e) hemosiderosis.

16. Type of necrosis based on the mechanism of action of the etiological factor:
Variants of answer:
a) direct;
b) gangrene;
c) sequestrum;
d) bedsore;
e) infarct.

17. In a sensitized organism, which type of necrosis develops:
Variants of answer:
a) trophoneurotic necrosis;
b) toxic necrosis;
c) allergic necrosis;
d) traumatic necrosis;
e) vascular necrosis.

18. Specify the most common localization of fibrinoid necrosis:
Variants of answer:
a) muscles;
b) nervous tissue;
c) bone tissue;

d) vascular wall;
e) adipose tissue.

19. Specify the etiological type of necrosis that develops in the Arthus phenomenon:

Variants of answer:
a) vascular;
b) toxic;
c) traumatic;
d) allergic;
e) trophoneurotic.

20. Specify the causes of vascular necrosis:

Variants of answer:
a) vessel thrombosis;
b) thromboembolism;
c) vessel spasm;
d) all answers are correct;
e) all answers are incorrect.

21. Around the focus of necrosis in living tissues, there is the development of:

Variants of answer:
a) autolysis;
b) tissue hypoxia;
c) demarcation inflammation;
d) necrobiosis;
e) calcification.

22. Characteristics of vascular necrosis:

Variants of answer:
a) direct, caused by catecholamines;
b) traumatic;
c) indirect, can occur due to shunting of blood flow;
d) trophoneurotic;
e) allergic.

23. Name a disease in which vascular necrosis often occurs:

Variants of answer:
a) tuberculosis;
b) lobar pneumonia;
c) influenza;
d) anemia;
e) arterial hypertension.

24. Name the morphological form of necrosis:
Variants of answer:
a) toxic;
b) coagulative;
c) traumatic;
d) infarct;
e) sequestrum.

25. When exposed to chemical and physical factors, what will develop:
Variants of answer:
a) mechanical necrosis;
b) vascular necrosis;
c) trophoneurotic necrosis;
d) traumatic necrosis;
e) allergic necrosis.

26. Specify the typical localization of colliquative necrosis:
Variants of answer:
a) bones;
b) connective tissue;
c) brain;
d) spleen;
e) myocardium.

27. Specify the varieties of coagulative necrosis:
Variants of answer:
a) caseous;
b) Zenker's necrosis of the anterior abdominal wall muscles;
c) fibrinoid;
d) waxy;
e) all answers are correct.

28. Name a disease in which fibrinoid necrosis often occurs:
Variants of answer:
a) intestinal infections;
b) rheumatoid arthritis;
c) influenza;
d) leukemia;
e) childhood infections.

29. Name a disease in which caseous necrosis develops:
Variants of answer:
a) intestinal infections;
b) atherosclerosis;

c) tuberculosis;
d) abdominal typhus;
e) arterial hypertension.

30. Give a microscopic characteristic of the demarcation zone:
Variants of answer:
a) zone of ischemia;
b) accumulation of leukocytes and fullness of blood vessels;
c) accumulation of erythrocytes;
d) vessel spasm;
e) connective tissue capsule.

31. Definition of the concept "gangrene":
Variants of answer:
a) etiological type of necrosis;
b) clinical-morphological form of necrosis;
c) vascular necrosis;
d) necrosis of tissues in contact with the external environment;
e) toxic necrosis.

32. Specify types of gangrene:
Variants of answer:
a) dry;
b) wet;
c) bedsore;
d) all answers are correct;
e) all answers are incorrect.

33. Name an organ where gangrene can develop:
Variants of answer:
a) lungs;
b) brain;
c) uterus;
d) liver;
e) heart.

34. Specify the most common localization of wet gangrene:
Variants of answer:
a) intestines;
b) spinal cord;
c) heart;
d) umbilical cord;
e) liver.

35. Type of necrosis in tuberculosis:

Variants of answer:

a) wet;

b) waxy;

c) coagulative, caseous;

d) coagulative, fibrinoid;

e) Zenker's necrosis.

36. Type of necrosis that develops in the direct abdominal muscles during acute infectious diseases:

Variants of answer:

a) caseous;

b) colliquative;

c) waxy;

d) fibrinoid;

e) cheesy.

37. Synonym for total colliquative cell necrosis:

Variants of answer:

a) fatty degeneration;

b) apoptosis;

c) hyaline droplet degeneration;

d) paranecrosis;

e) ballooning degeneration.

38. Specify the most common localization of dry gangrene:

Variants of answer:

a) extremities;

b) intestines;

c) heart;

d) spleen;

e) lungs.

39. Name the chemical compound that causes the black color of gangrenous tissues:

Variants of answer:

a) hemomelanin;

b) lipofuscin;

c) sulfhemoglobin;

d) ferrous sulfide;

e) hematoidin.

40. Characteristics of tissues in dry gangrene:

Variants of answer:

a) hardening, shriveling;

b) well-defined demarcation line;
c) tissue dense, dark in color;
d) all answers are correct;
e) all answers are incorrect.

41. Characteristics of tissues in wet gangrene:
Variants of answer:
a) swelling, edema;
b) indistinct demarcation line;
c) tissue purplish-black in color;
d) all answers are correct;
e) all answers are incorrect.

42. Microscopic change in the serous membrane of the intestine during gangrene development:
Variants of answer:
a) fibrinous inflammation;
b) sclerosis;
c) hyaline degeneration;
d) hemosiderosis;
e) deposition of hematoidin.

43. Specify the most common cause of intestinal gangrene:
Variants of answer:
a) intoxication;
b) thrombosis of mesenteric arteries;
c) coprolithiasis;
d) coprostasis;
e) abdominal adhesions.

44. Name a disease in which intestinal gangrene often develops:
Variants of answer:
a) atherosclerosis;
b) pneumonia;
c) tuberculosis;
d) diabetes mellitus;
e) bronchitis.

45. Name the type of gangrene that develops on the skin in debilitated children:
Variants of answer:
a) sequestrum;
b) wet gangrene;

c) dry gangrene;
d) anaerobic gangrene;
e) aerobic gangrene.

46. Definition of the concept "bedsore":
Variants of answer:
a) trophoneurotic necrosis;
b) etiological type of necrosis;
c) a type of hyperplasia;
d) a type of infarction;
e) allergic necrosis.

47. Definition of the concept "sequestrum":
Variants of answer:
a) a type of gangrene;
b) etiological type of necrosis;
c) a type of calcification;
d) an area of necrosis that has not undergone autolysis and sclerosis;
e) clinical-morphological form of necrosis.

48. Definition of the concept "infarct":
Variants of answer:
a) toxic necrosis;
b) allergic necrosis;
c) direct necrosis;
d) vascular necrosis;
e) clinical-morphological form of necrosis.

49. Specify the most common localization of an infarct:
Variants of answer:
a) lower extremities;
b) heart;
c) gallbladder;
d) stomach;
e) pancreas.

50. Name a disease in which vascular necrosis often occurs:
Variants of answer:
a) tuberculosis;
b) atherosclerosis;
c) influenza;
d) actinomycosis;
e) syphilis.

51. Synonym for vascular necrosis:
Variants of answer:
a) infarct;
b) dystonic;
c) allergic;
d) gangrene;
e) sequestrum.

52. Characteristic outcome of dry necrosis:
Variants of answer:
a) thrombosis;
b) encapsulation;
c) scarring;
d) petrifaction;
e) correct answers b, c, d.

53. Characteristic outcome of wet necrosis in the brain:
Variants of answer:
a) scarring;
b) petrifaction;
c) mummification;
d) ossification;
e) cyst formation.

54. Unfavorable outcome of necrosis:
Variants of answer:
a) purulent liquefaction;
b) ossification;
c) organization;
d) encapsulation;
e) cyst formation.

55. Favorable outcomes of necrosis:
Variants of answer:
a) organization;
b) petrifaction;
c) ossification;
d) encapsulation;
e) all answers are correct.

56. Name a variety of necrosis that often develops in the intestines:
Variants of answer:
a) bedsore;
b) dry gangrene;

c) wet gangrene;
d) noma;
e) sequestrum.

57. Name a variety of necrosis that often develops in bones:
Variants of answer:
a) bedsore;
b) gangrene;
c) infarct;
d) sequestrum;
e) noma.

58. Specify the typical localization of a sequestrum:
Variants of answer:
a) myocardium;
b) lungs;
c) bones;
d) brain;
e) muscles.

59. Specify the varieties of necrosis that can develop in the lungs:
Variants of answer:
a) coagulative necrosis;
b) wet gangrene, infarct;
c) sequestrum;
d) bedsore;
e) dry gangrene.

60. Name an organ where dry gangrene can develop:
Variants of answer:
a) extremities;
b) lungs;
c) small intestine;
d) large intestine;
e) uterus.

61. Specify microscopic changes in the kidneys during infarction:
Variants of answer:
a) necrosis of glomeruli, necrosis of tubules, vessels;
b) glomerular tuft proliferation;
c) glomeruli preserved, tubules necrotic;
d) necrosis of glomeruli, tubules preserved;
e) necrosis of only proximal and distal tubules.

62. Histochemical reaction used to detect early signs of myocardial necrosis:

Variants of answer:

a) sudan III;
b) toluidine blue;
c) potassium tellurite reaction;
d) PAS reaction;
e) Van Gieson's picrofuchsin.

63. The histochemical reaction with potassium tellurite to detect early signs of myocardial necrosis is based on:

Variants of answer:

a) early disappearance of glycogen from cardiomyocytes;
b) disappearance of lipids;
c) appearance of lipid inclusions;
d) disappearance of protein;
e) appearance of protein grains.

64. Specify the change in mitochondria detected in the early stages of myocardial necrosis:

Variants of answer:

a) condensation;
b) rupture of cristae;
c) hyperplasia of mitochondria;
d) hypertrophy of mitochondria;
e) calcium deposition on cristae.

65. Name the most common outcome of caseous necrosis:

Variants of answer:

a) petrifaction;
b) hyaline degeneration;
c) purulent liquefaction;
d) cyst formation;
e) ossification.

66. Macroscopic appearance of splenic infarction:

Variants of answer:

a) triangular, red, dense;
b) triangular, flaccid, gray;
c) round, dense, white;
d) triangular, dense, white;
e) on the capsule of hemorrhage.

67. Characteristic morphological manifestations of follicular necrosis of the spleen in infectious diseases (sepsis, abdominal typhus):

Variants of answer:

a) karyorrhexis, karyolysis;
b) plasmorhexis;
c) plasmolysis;
d) plasmocoagulation;
e) hyaline degeneration.

68. Macroscopic condition of the spleen capsule at the site of infarction:

Variants of answer:

a) sclerosis;
b) hyaline degeneration;
c) hemorrhage;
d) adhesions;
e) fibrinous inflammation.

69. Clinical manifestation of necrosis of kidney tubular epithelium:

Variants of answer:

a) anuria (acute kidney failure);
b) chronic kidney failure;
c) hematuria;
d) proteinuria;
e) cylinderuria.

70. Name the pathological process in the myocardium that develops with coronary artery thrombosis:

Variants of answer:

a) colliquative necrosis;
b) myocardial infarction;
c) sequestrum;
d) gangrene;
e) hyaline degeneration.

71. Name the main etiological factor of epithelial necrosis of proximal and distal kidney tubules (necrotic nephrosis):

Variants of answer:

a) toxic;
b) traumatic;
c) chemical;
d) thrombosis of the renal artery;
e) thromboembolism of the renal artery.

72. The most characteristic manifestations of epithelial necrosis of proximal and distal kidney tubules are:

Variants of answer:

a) karyopyknosis, plasmolysis;
b) karyorrhexis, plasmolysis;
c) karyolysis, plasmorhexis;
d) plasmocoagulation, karyopyknosis;
e) karyorrhexis, plasmorhexis.

73. Specify the nephron segments that undergo necrosis in necrotic nephrosis:

Variants of answer:

a) glomeruli;
b) collecting tubule epithelium;
c) epithelium of straight tubules;
d) epithelium of proximal tubules, epithelium of distal tubules;
e) tubular epithelium.

74. Name the etiological causes of myocardial infarction:

Variants of answer:

a) thrombosis;
b) thromboembolism;
c) vascular spasm;
d) all answers are correct;
e) all answers are incorrect.

75. Specify the pathological condition in the lungs resulting from thromboembolism as a favorable outcome:

Variants of answer:

a) caseous necrosis;
b) fibrinoid necrosis;
c) infarction;
d) waxy necrosis;
e) mucoid swelling.

76. Name an organ in which only hemorrhagic infarction occurs:

Variants of answer:

a) spleen;
b) liver;
c) kidneys;
d) lungs;
e) heart.

77. Name the most common outcome of myocardial infarction:

Variants of answer:

a) aseptic autolysis;

b) petrifaction;

c) purulent liquefaction;

d) organization;

e) cyst formation.

78. Specify the pathological condition in the lungs resulting from thromboembolism:

Variants of answer:

a) hemorrhagic pulmonary infarction;

b) general hemosiderosis;

c) ischemic infarction;

d) gangrene;

e) pulmonary tuberculosis.

79. Name the mechanism of formation of hemorrhagic rim in myocardial infarction:

Variants of answer:

a) paralysis of small vessels;

b) thrombosis of vessels;

c) hyaline degeneration of vessels;

d) fibrinoid necrosis of vessels;

e) lipid droplet degeneration of cardiomyocytes.

80. Name the type of necrosis that occurs in the area of the umbilical cord segment in all newborns when it is clamped:

Variants of answer:

a) wet gangrene;

b) colliquative;

c) coagulative;

d) dry gangrene;

e) bedsore.

81. Name the necrosis of the renal tubular epithelium:

Variants of answer:

a) glomerulonephritis;

b) necrotic nephrosis;

c) lupoid necrosis;

d) pyelonephritis;

e) nephrolithiasis.

82. All statements are correct regarding the development of myocardial infarction, except:

Variants of answer:

a) upon macroscopic examination during autopsy, it is diagnosed 2 hours after coronary artery occlusion;

b) 3–5-day-old infarction is easily detected on autopsy due to its light gray color;

c) typical microscopic changes are detected 8 hours after and are represented by karyolysis and karyorrhexis;

d) leukocytic infiltration is most pronounced at 2–4 days after coronary artery occlusion;

e) pericarditis more often occurs with transmural infarction than with subendocardial and intramural infarction.

83. Choose the correct conclusion:

Variants of answer:

a) heterolysis – tissue changes associated with the use of a fixative for making histological preparations;

b) autolysis – tissue melting with extracellular enzymes;

c) fibrinoid necrosis – ischemic necrosis that occurs with the occlusion of vessels by fibrin clots;

d) apoptosis – cell death due to the accumulation of protein granules;

e) necrobiosis – a stage of apoptosis.

84. All types of necrosis are correctly matched with the organs for which they are typical, except:

Variants of answer:

a) coagulative necrosis – heart, kidneys;

b) colliquative necrosis – spleen, lung;

c) caseous necrosis – various organs;

d) fibrinoid necrosis – vessel walls;

e) waxy necrosis – abdominal wall muscles.

5. CIRCULATORY DISORDERS. HYPEREMIA. STASIS

Choose one correct variant of answer

1. Give the definition of the concept "bleeding":

Variants of answer:

a) the exit of blood from the cavity of the heart or the lumen of a vessel into the surrounding environment or body cavities;

b) the exit of blood plasma from the lumen of a blood vessel;

c) the exit of blood from the cavity of the heart into a body cavity;

d) increased vascular permeability;

e) the exit of blood plasma proteins from the lumen of a blood vessel.

2. Bleeding from the uterus is called:

Variants of answer:

a) hemorrhage;

b) diarrhea;

c) metrorrhagia;

d) catarrh;

e) myomalacia.

3. The accumulation of blood in the pericardial cavity is called:

Variants of answer:

a) hemothorax;

b) hemangioma;

c) hemopericardium;

d) hydrothorax;

e) pericarditis.

4. The accumulation of blood in the pleural cavity is called:

Variants of answer:

a) hemopericardium;

b) hydrothorax;

c) fibrothorax;

d) pleuritis;

e) hemothorax.

5. The accumulation of blood in the abdominal cavity is called:

Variants of answer:

a) hemopericardium;

b) hemoperitoneum;

c) ascites;

d) peritonitis;
e) hamartoma.

6. Name the process in which coagulated blood accumulates in tissues with a disruption of their integrity:

Variants of answer:
a) hematoma;
b) ischemia;
c) hemangioma;
d) hyperemia;
e) edema.

7. Name the process in which blood accumulates in tissues with the preservation of tissue elements:

Variants of answer:
a) hemorrhagic infiltration;
b) hematoma;
c) hemangioma;
d) hemosiderosis;
e) hemoblastosis.

8. Give the definition of the concept "ecchymosis":

Variants of answer:
a) accumulation of blood in cavities;
b) small hematoma;
c) bleeding in the skin;
d) flat bleeding in the skin, mucous membranes;
e) petechial hemorrhages.

9. Give the definition of the concept "petechiae":

Variants of answer:
a) multiple large hemorrhages;
b) coalescing hemorrhages in the skin;
c) point hemorrhages;
d) large hemorrhages in the mucous membranes;
e) flat hemorrhages.

10. Name the mechanisms of bleeding:

Variants of answer:
a) vessel rupture;
b) erosion of the vessel wall;
c) increased permeability of the vessel wall;
d) all answers are correct;
e) none of the answers are correct.

11. The listed pathological processes can contribute to vessel wall rupture, except:

Variants of answer:

a) injury;
b) trauma;
c) necrosis;
d) inflammation;
e) cytomegalovirus.

12. Name the pathological process in which heart rupture can occur:

Variants of answer:

a) regeneration;
b) edema;
c) hypertrophy;
d) myocardial infarction;
e) hyalinosis.

13. Name a disease in which aortic rupture is possible:

Variants of answer:

a) rheumatism;
b) mitral valve stenosis;
c) bronchiectasis;
d) syphilis;
e) pneumonia.

14. Name a disease in which bleeding in the brain is often observed:

Variants of answer:

a) stenosis of the carotid artery;
b) arterial hypertension;
c) syphilis;
d) iron-deficiency anemia;
e) tuberculosis.

15. Indicate the type of bleeding in the brain that occurs with arterial hypertension:

Variants of answer:

a) hemangioma;
b) liquefactive necrosis;
c) ischemic infarction;
d) petechiae;
e) hematoma.

16. Name the mechanism of hematoma development in arterial hypertension:

Variants of answer:

a) erosion of the vessel wall;

b) rupture of the vessel;

c) increased permeability;

d) edema;

e) hyalinosis.

17. Indicate the change in the vessel wall that contributes to its rupture in arterial hypertension:

Variants of answer:

a) hyalinosis;

b) amyloidosis;

c) mucoid swelling;

d) stasis;

e) sludge phenomenon.

18. Indicate pathological processes in which erosive bleeding in organs is possible:

Variants of answer:

a) inflammation;

b) necrosis;

c) malignant tumor;

d) all answers are correct;

e) none of the answers are correct.

19. Specify the factor that causes damage to the vessel wall in the focus of purulent inflammation:

Variants of answer:

a) proteolytic enzymes of leukocytes;

b) microorganisms;

c) edema;

d) hyperemia;

e) fibrinoid necrosis.

20. List diseases in which gastrointestinal bleeding is possible:

Variants of answer:

a) Crohn's disease;

b) stomach ulcer;

c) abdominal typhus;

d) stomach cancer;

e) all answers are correct.

21. Pulmonary bleeding is possible in all of the following diseases except:

Variants of answer:

a) acute abscess;
b) atherosclerosis;
c) chronic abscess;
d) tuberculosis;
e) lung cancer.

22. Gastrointestinal bleeding is possible in all of the following diseases except:

Variants of answer:

a) duodenal ulcer;
b) mucoviscidosis;
c) dysentery;
d) colon cancer;
e) non-specific ulcerative colitis.

23. Specify the characteristic symptom of gastrointestinal bleeding:

Variants of answer:

a) melena;
b) vomiting with "coffee ground" appearance;
c) hematuria;
d) hemochromatosis;
e) melanosis.

24. Name the factor that is important in the pathogenesis of diapedetic bleeding:

Variants of answer:

a) electrolyte disturbances;
b) hyperlipidemia;
c) increased vascular wall permeability;
d) vessel wall rupture;
e) erosion of the vessel wall.

25. Name a disease in which diapedetic bleeding may occur:

Variants of answer:

a) Pompe's disease;
b) vasculitis;
c) Gaucher's disease;
d) Niemann-Pick disease;
e) overdose of anticoagulants.

26. Give the name of the syndrome in which diapedetic bleeding takes on a systemic character:

Variants of answer:

a) hemolytic;
b) diapedetic;
c) disseminated coagulopathy;
d) hemorrhagic;
e) fibrinolytic.

27. Specify a favorable outcome of bleeding in the brain:

Variants of answer:

a) formation of a rusty cyst;
b) formation of a fibrous scar;
c) liquefactive necrosis;
d) inflammation;
e) hyalinosis.

28. Specify an unfavorable outcome of bleeding as a pathological process:

Variants of answer:

a) resorption of blood;
b) cyst;
c) canalization;
d) coagulation;
e) necrosis.

29. List the vessels from which diapedetic bleeding may occur:

Variants of answer:

a) arterioles;
b) venules;
c) capillaries;
d) all answers are correct;
e) none of the answers are correct.

30. Give the definition of the concept "plasmorrhagia":

Variants of answer:

a) blood exit from the lumen of a vessel;
b) the exit of blood plasma from the bloodstream;
c) accumulation of plasma in body cavities;
d) accumulation of blood in tissues;
e) vessel wall rupture.

31. Give the definition of the concept "plasmatic impregnation":

Variants of answer:

a) exit of plasma from the bloodstream;

b) blood exit from the lumen of a vessel;
c) diapedesis;
d) impregnation of the vessel wall and surrounding tissues with plasma;
e) impregnation of surrounding tissues with blood.

32. Specify a disease in which bleeding in the adrenal glands can be a cause of death:

Variants of answer:
a) meningococcemia;
b) atherosclerosis;
c) lung cancer;
d) stomach cancer;
e) pneumonia.

33. Specify the pathological process that can develop in the case of extreme vascular permeability:

Variants of answer:
a) plasmorrhagia;
b) atherosclerosis;
c) amyloidosis;
d) fibrinoid necrosis;
e) erosion of the vessel wall.

34. List the factors that most commonly lead to damage to microvessels:

Variants of answer:
a) atherosclerosis;
b) tumor processes;
c) mucoid swelling;
d) muddy swelling;
e) immunopathological reactions.

35. Specify the outcome of plasmatic impregnation:

Variants of answer:
a) tumor;
b) hematoma;
c) hyalinosis;
d) amyloidosis;
e) atherosclerosis.

36. Among the main forms of lymphatic system insufficiency, all but one includes:

Variants of answer:
a) mechanical;
b) functional;

c) dynamic;
d) associated with impaired drainage function;
e) resorptive.

37. Name the pathological process that develops in the stroma of organs and tissues in cases of chronic lymphatic stasis:

Variants of answer:
a) hyalinosis;
b) sclerosis;
c) amyloidosis;
d) infiltration;
e) fibrinoid.

38. Specify the factor that determines the activation of fibroblasts in cases of chronic lymphatic stasis:

Variants of answer:
a) dystrophy;
b) hyperemia;
c) edema;
d) hypoxia;
e) necrobiosis.

39. Provide a description of transudate:

Variants of answer:
a) turbid;
b) clear, containing no more than 2% protein;
c) contains red blood cells;
d) contains fibrin;
e) contains 10% protein.

40. Give the name for the diffuse accumulation of edematous fluid in subcutaneous adipose tissue:

Variants of answer:
a) anasarca;
b) ascites;
c) polycythemia;
d) plethora;
e) exudation.

41. Give the name for the accumulation of transudate in the pericardial cavity:

Variants of answer:
a) hairy heart;

b) pancaked heart;
c) hydropericardium;
d) pericarditis;
e) hemopericardium.

42. Give the name for the accumulation of edematous fluid in pleural cavities:

Variants of answer:
a) pleuritis;
b) hemothorax;
c) fibrothorax;
d) pneumothorax;
e) hydrothorax.

43. Give the name for the excessive accumulation of cerebrospinal fluid in the brain's ventricles:

Variants of answer:
a) encephalitis;
b) hydrocephalus;
c) hydrocele;
d) glioblastoma;
e) edema.

44. Reduced tissue fluid content is called:

Variants of answer:
a) dehydration;
b) edema;
c) hypoplasia;
d) hypovolemia;
e) atrophy.

45. Specify a disease in which dehydration can develop:

Variants of answer:
a) arterial hypertension;
b) cholera;
c) hemoblastoses;
d) encephalitis;
e) stomach cancer.

46. Name the main types of circulatory disturbances:

Variants of answer:
a) hyperemia;
b) hemorrhage;

c) thrombosis;
d) stasis;
e) all answers are correct.

47. Give the definition of the concept "venous congestion":
Variants of answer:
a) reduced blood flow to an organ or tissue;
b) increased blood flow to an organ or tissue;
c) sudden dilation of venous vessels;
d) increased blood filling of an organ;
e) increased blood filling of an organ due to reduced blood outflow.

48. Name a disease that leads to the development of acute total venous congestion:
Variants of answer:
a) myocardial infarction;
b) heart defect;
c) chronic ischemic heart disease;
d) bronchopneumonia;
e) cardiopathic amyloidosis.

49. In acute venous congestion in tissues, the following pathological processes are observed, except:
Variants of answer:
a) plasmatic impregnation;
b) plasmorrhagia;
c) edema, stasis;
d) hyalinosis;
e) diapedetic hemorrhages.

50. Specify the pathological process that develops in the parenchyma of organs in cases of acute total venous congestion:
Variants of answer:
a) sclerosis;
b) amyloidosis;
c) fibrinoid;
d) hyalinosis;
e) necrosis.

51. List the changes observed in the lungs in acute venous congestion:
Variants of answer:
a) edema, hemorrhages;
b) hyalinosis;
c) amyloidosis;

d) fibrinoid;
e) sclerosis.

52. Name the predominant change in nephrocytes of the kidneys in acute venous congestion:

Variants of answer:
a) dystrophy;
b) hyalinosis;
c) amyloidosis;
d) ischemia;
e) thrombosis.

53. Specify the change in the stroma of organs characteristic of chronic total venous congestion:

Variants of answer:
a) necrosis;
b) sclerosis;
c) dystrophy;
d) amyloidosis;
e) inflammation.

54. The development of sclerosis in hypoxia is based on:

Variants of answer:
a) tissue consolidation;
b) stimulation of collagen synthesis by fibroblasts;
c) stimulation of amyloid synthesis;
d) plasma protein denaturation;
e) fatty infiltration.

55. For the macroscopic description of a mottled liver in chronic total venous congestion, all are correct except:

Variants of answer:
a) sharp edges;
b) increased in size;
c) dense consistency;
d) mottled appearance on section;
e) smooth surface.

56. Specify the microscopic changes that account for the mottled appearance on section of the liver in chronic total venous congestion:

Variants of answer:
a) expansion and congestion of central parts of lobules;
b) regeneration of hepatocytes;

c) carbohydrate degeneration of hepatocytes;
d) hepatocytes dysplasia;
e) hepatocytes metaplasia.

57. Name the process that develops in the lungs in chronic total venous congestion:

Variants of answer:
a) brown atrophy;
b) brown induration;
c) general hemosiderosis;
d) atrophy;
e) necrosis.

58. Name the pathological process that leads to the development of brown induration in the lungs:

Variants of answer:
a) edema;
b) brown atrophy;
c) lipoidosis;
d) arterial hypotension;
e) arterial hyperemia.

59. Factors playing a role in the morphogenesis of brown induration in the lungs are correctly stated, except:

Variants of answer:
a) stasis fullness;
b) hypertension in the small circulation;
c) hypoxia;
d) nervous-endocrine disorders;
e) diapedetic hemorrhages.

60. Name the change in the kidneys in chronic total venous congestion:

Variants of answer:
a) hemosiderosis;
b) hyalinosis;
c) brown induration;
d) sclerosis;
e) amyloidosis.

61. Name a disease in which mottled liver is encountered as a result of local venous congestion:

Variants of answer:
a) Budd-Chiari syndrome;

b) Paget's disease;
c) Hodgkin's disease;
d) atherosclerosis;
e) Krukenberg's disease.

62. The mechanism of the development of localized venous congestion includes:

Variants of answer:
a) increased venous outflow from part of an organ or part of the body;
b) increased venous inflow;
c) increased arterial blood flow to an organ;
d) heart defect;
e) compression of a major vein by a tumor.

63. Give the definition of the term "hypovolemia":

Variants of answer:
a) reduction of blood flow due to acceleration of blood outflow;
b) reduction of arterial blood volume;
c) reduction of blood flow due to insufficient blood inflow;
d) reduction of venous blood volume;
e) reduction of tissue fluid volume.

64. List the types of hypovolemia depending on the causes of occurrence:

Variants of answer:
a) angiospastic;
b) obstructive;
c) compression;
d) due to blood redistribution;
e) all answers are correct.

65. Name a pathological process that can develop as a result of obstructive hypovolemia:

Variants of answer:
a) sclerosis;
b) tumor;
c) petrification;
d) infarction;
e) ossification.

66. Specify one of the possible outcomes of thrombosis:

Variants of answer:
a) fibrinoid swelling;
b) suppurative liquefaction;

c) lipoid degeneration;
d) perforation of the vessel wall;
e) malignant transformation.

67. Name one of the reasons for the development of compression hypovolemia of an organ:

Variants of answer:

a) compression of the outflowing vein by a tumor;
b) compression of the inflowing vein by a tumor;
c) closure of the lumen of the inflowing vessel by a thrombus;
d) closure of the lumen of the outflowing vessel by a thrombus;
e) spasm of the outflowing vessel.

68. Specify the reason for the development of gastrointestinal bleeding in a patient with chronic gastric ulcer:

Variants of answer:

a) transition of the inflammatory process to the vessel wall in the base of the ulcer;
b) erosion of the vessel wall at the base of the ulcer by proteolytic enzymes during suppuration;
c) erosion of the vessel wall at the base of the ulcer by gastric juice;
d) rupture of the vessel wall at the base of the ulcer;
e) diapedesis of erythrocytes from vessels at the base of the ulcer.

69. Name the condition in which diapedetic hemorrhage can occur in a newborn:

Variants of answer:

a) toxoplasmosis;
b) birth trauma;
c) asphyxia;
d) pyloric stenosis;
e) patent ductus arteriosus.

6. THROMBOSIS. EMBOLISM. INFARCTION

Choose one correct variant of answer

1. Give the definition of the concept of "thrombosis":
Variants of answer:
a) circulation of formed elements in the blood;
b) intravital blood clotting in the cavities of the heart and/or vessel lumen;
c) blood clotting in serous cavities;
d) postmortem blood clotting;
e) cessation of blood flow.

2. Name the macroscopic parts of a thrombus:
Variants of answer:
a) erythrocytes, fibrin;
b) leukocytes, platelets;
c) head, body, tail;
d) inclusion of potassium and magnesium;
e) inclusion of calcium, pigments.

3. Specify the type of thrombus depending on its composition:
Variants of answer:
a) organized;
b) white, red;
c) with a corrugated surface;
d) yellow;
e) parietal.

4. List the elements that make up a white thrombus:
Variants of answer:
a) erythrocytes, fibrin, leukocytes;
b) blood plasma proteins;
c) platelets, leukocytes, fibrin;
d) fibrin, erythrocytes;
e) platelets, fibrin, erythrocytes.

5. List the elements that make up a red thrombus:
Variants of answer:
a) blood plasma proteins;
b) erythrocytes, fibrin, platelets;
c) fibrin, leukocytes;
d) leukocytes, platelets, fibrin;
e) erythrocytes.

6. List the elements that make up a mixed thrombus:

Variants of answer:

a) erythrocytes, leukocytes, fibrin;
b) leukocytes, fibrin, blood plasma proteins;
c) fibrin, platelets;
d) blood plasma proteins, erythrocytes;
e) platelets, erythrocytes.

7. Name a synonym for DIC syndrome:

Variants of answer:

a) hemorrhagic syndrome, anemia;
b) prethrombotic state;
c) thromboembolic syndrome;
d) thrombohemorrhagic purpura;
e) consumptive coagulopathy.

8. Name the conditions that can be complicated by DIC syndrome:

Variants of answer:

a) extensive trauma;
b) pregnancy nephropathy;
c) shock;
d) all answers are correct;
e) all answers are incorrect.

9. Name the morphological manifestations of DIC syndrome:

Variants of answer:

a) thrombi in microcirculatory vessels;
b) multiple hemorrhages;
c) multiple small foci of necrosis in organs;
d) all answers are correct;
e) all answers are incorrect.

10. Name the common predisposition that contributes to thrombus formation:

Variants of answer:

a) blood flow disturbance;
b) increased blood flow;
c) anemia;
d) imbalance between the coagulation and anticoagulation systems;
e) platelet aggregation.

11. Name a local factor that contributes to thrombus formation:

Variants of answer:

a) inhibition of coagulation factors;

b) activation of fibrinogen;
c) slowing and disturbance of blood flow;
d) changes in blood composition;
e) patient's age.

12. Name the stage of thrombus formation:
Variants of answer:
a) hemolysis of erythrocytes;
b) plasmorrhagia;
c) coagulation of fibrinogen;
d) precipitation of platelets;
e) leukopedesis.

13. Name the favorable outcomes of thrombosis:
Variants of answer:
a) amyloidosis;
b) organization;
c) edema;
d) calcification;
e) organization and calcification.

14. Specify the main morphological manifestation of thrombus organization:
Variants of answer:
a) deposition of amyloid;
b) deposition of calcium salts;
c) proliferation of connective tissue;
d) smoothening;
e) vascularization.

15. Specify the part of the thrombus where its organization begins:
Variants of answer:
a) head;
b) body;
c) tail;
d) does not matter;
e) back.

16. Name the outcome of thrombosis in which fissures lined with endothelium appear in the thrombus:
Variants of answer:
a) canalization;
b) petrification;
c) epithelization;

d) phlebitis formation;
e) organization.

17. Name an unfavorable outcome of thrombosis:
Variants of answer:
a) vascularization;
b) canalization;
c) suppurative liquefaction;
d) calcification;
e) lysis.

18. In the case of thrombosis of a nutrient artery in an organ, what develops:
Variants of answer:
a) inflammation;
b) edema;
c) hyperemia;
d) ischemia;
e) infarction.

19. Thrombosis of the deep veins of the calf can be complicated by:
Variants of answer:
a) myocardial infarction;
b) intestinal infarction;
c) gangrene of the lower extremity;
d) cerebral artery thromboembolism;
e) lung infarction.

20. Name the types of thrombi based on their relation to the vessel lumen:
Variants of answer:
a) parietal;
b) mixed;
c) vascular;
d) elastic;
e) hyalin.

21. Parietal thrombi are often found in the following locations, except:
Variants of answer:
a) on the epicardium;
b) in large arteries;
c) in heart aneurysms;
d) in vessel aneurysms;
e) in large veins.

22. An obstructive thrombus is dangerous for:

Variants of answer:

a) developing hyperemia;
b) developing infarctions and gangrene;
c) developing amyloidosis;
d) developing nephrotic syndrome;
e) developing hemorrhagic syndrome.

23. Name the cause of thrombus formation in aortic aneurysms:

Variants of answer:

a) integrity breach of the vessel's intima;
b) thromboembolism;
c) venous stasis;
d) arterial hyperemia;
e) necrosis.

24. Specify the location where hyaline thrombi are often found:

Variants of answer:

a) in the aorta;
b) in coronary arteries;
c) in veins;
d) in the renal artery;
e) in microcirculatory vessels.

25. Specify the location where laminated thrombi are often found:

Variants of answer:

a) in capillaries;
b) in coronary arteries;
c) in the cavity of an aortic aneurysm;
d) in veins;
e) in the renal artery.

26. Give the definition of the concept of "embolism":

Variants of answer:

a) intravital blood clotting;
b) the circulation of particles not normally found in the blood or lymph and their obstruction of vessel lumens;
c) blood exiting the vascular bed;
d) cessation of blood flow;
e) postmortem blood clotting.

27. Specify the main mechanism of embolism development:

Variants of answer:

a) closure of the vessel lumen;

b) fatty degeneration;
c) pinocytosis;
d) karyorrhexis;
e) karyolysis.

28. Give the definition of "orthograde embolism":
Variants of answer:
a) movement of the embolus with the blood flow;
b) movement of the embolus against the blood flow;
c) movement of the embolus from the small circulation to the large circulation, bypassing the lungs;
d) movement of the embolus along veins;
e) movement of the embolus along arteries.

29. Give the definition of "paradoxical embolism":
Variants of answer:
a) movement of the embolus against the blood flow;
b) movement of the embolus with the blood flow;
c) movement of the embolus from the small circulation to the large circulation, bypassing the lungs;
d) cessation of embolus movement;
e) slowed embolus movement.

30. Give the definition of "retrograde embolism":
Variants of answer:
a) movement of the embolus through an open oval window;
b) movement of the embolus against the blood flow;
c) movement of the embolus with the blood flow;
d) movement of the embolus through arteriovenous anastomoses;
e) movement of the embolus through lymphatic vessels.

31. Name the most common type of embolism in clinical practice:
Variants of answer:
a) bacterial;
b) air;
c) gas;
d) fatty;
e) thromboembolism.

32. Name a disease in which bacterial embolism occurs:
Variants of answer:
a) atherosclerosis;
b) malignant tumors;

c) sepsis;
d) caisson disease;
e) bone fractures.

33. Name a disease in which tissue embolism occurs:
Variants of answer:
a) malignant tumors;
b) neck injuries;
c) bone fractures;
d) infectious diseases;
e) atherosclerosis.

34. Caisson disease can develop in:
Variants of answer:
a) speleologists;
b) pilots;
c) mountaineers;
d) divers;
e) welders.

35. Conditions leading to the occurrence of air embolisms:
Variants of answer:
a) bone injuries;
b) neck vein injuries;
c) tissue contusion;
d) vessel rupture;
e) caisson disease.

36. The cause of fat embolism development:
Variants of answer:
a) improper administration of liquid medications;
b) ulceration of atherosclerotic plaque;
c) femoral fractures;
d) burns;
e) excessive consumption of fatty foods.

37. Fat emboli in the lungs are located:
Variants of answer:
a) in veins;
b) in arteries;
c) in capillaries;
d) in the pulmonary artery;
e) in arteriovenous anastomoses.

38. Fat embolism can be diagnosed using the following staining:

Variants of answer:

a) picric acid;
b) PAS reaction;
c) sudan III;
d) Perls' reaction;
e) congo red.

39. Thromboembolic syndrome often develops with:

Variants of answer:

a) childhood infections;
b) viral infections;
c) cardiovascular diseases;
d) stomach diseases;
e) accumulation diseases (thaesaurismoses).

40. Specify the locations of thrombi that can be sources of thromboembolism in the systemic circulation:

Variants of answer:

a) on the valve flaps of the right heart chambers;
b) in the cavity of a heart aneurysm;
c) in the cavity of an aortic aneurysm;
d) all answers are correct;
e) all answers are incorrect.

41. Name the source of pulmonary artery thromboembolism:

Variants of answer:

a) thrombi in pulmonary veins;
b) thrombi in veins of the lower extremities;
c) thrombi in the portal vein;
d) thrombi in arteries of the pelvis;
e) thrombi in leg arteries.

42. Name the mechanism of death in pulmonary artery trunk thromboembolism:

Variants of answer:

a) rupture of the heart;
b) arrest of the heart due to the pulmocoronary reflex;
c) asphyxiation;
d) acute venous congestion;
e) pulmonary edema.

43. Give a characteristic of a pulmonary artery embolus:
Variants of answer:
a) shiny;
b) rough surface, freely lying in the vessel lumen;
c) layered;
d) elastic;
e) adhered to the vessel wall.

44. Give the definition of "infarction":
Variants of answer:
a) traumatic necrosis;
b) metabolic disorder in tissues;
c) vascular necrosis;
d) necrosis of an organ communicating with the external environment;
e) direct necrosis.

45. Name the factor that determines the shape of infarction in organs:
Variants of answer:
a) organ shape;
b) size of the thromboembolus;
c) angiarchitecture;
d) functional state of the organ;
e) reactivity of the organism.

46. Infarction most commonly occurs in all of the following organs, except:
Variants of answer:
a) myocardium;
b) brain;
c) lungs;
d) kidneys;
e) lower extremities.

47. Name the morphological type of infarct:
Variants of answer:
a) vascular necrosis;
b) white, red;
c) triangular;
d) thromboembolic;
e) as a result of vessel rupture.

48. Name the main causes of infarction:
Variants of answer:
a) due to vessel spasm;
b) due to functional overstrain;

c) due to thrombosis;
d) all answers are correct;
e) all answers are incorrect.

49. List the organs in which white infarction occurs:
Variants of answer:
a) intestines, spleen;
b) liver, lungs;
c) heart, lungs, brain;
d) spleen, brain;
e) kidneys, liver, retinal.

50. Name the organ in which red infarction occurs:
Variants of answer:
a) lungs;
b) spleen;
c) brain;
d) heart;
e) intestines, kidneys.

51. Name the organ in which white infarct with a hemorrhagic rim occurs:
Variants of answer:
a) brain;
b) spleen;
c) lungs;
d) stomach;
e) kidney.

52. Name a favorable outcome of infarction developing by colliquative necrosis type:
Variants of answer:
a) suppurative liquefaction;
b) canalization;
c) vascularization;
d) cyst;
e) calcification.

53. Name a favorable outcome of infarction:
Variants of answer:
a) organization;
b) suppurative liquefaction;
c) organ atrophy;
d) canalization;
e) septic autolysis.

54. Name the cause of myocardial infarction:
Variants of answer:
a) intramural hemorrhage;
b) thrombus in the superior vena cava;
c) thrombus in the inferior vena cava;
d) sudden coronary artery dilation;
e) prolonged coronary artery spasm.

55. Name a disease in which myocardial infarction often occurs:
Variants of answer:
a) acute venous congestion;
b) heart defect;
c) chronic venous congestion;
d) anemia;
e) arterial hypertension.

56. Name a lethal complication of myocardial infarction:
Variants of answer:
a) heart rupture;
b) venous congestion;
c) organization;
d) chronic heart aneurysm formation;
e) pericarditis.

57. Name a favorable outcome of myocardial infarction:
Variants of answer:
a) aseptic autolysis;
b) suppurative liquefaction;
c) cardiosclerosis;
d) hairy heart;
e) myocardial hypertrophy.

58. Name the cause of lung infarction:
Variants of answer:
a) rupture of pulmonary veins;
b) thrombosis of small branches of the pulmonary artery;
c) thrombosis of the main pulmonary artery;
d) congestion of small branches of the pulmonary artery;
e) thromboembolism of the main pulmonary artery.

59. Give a macroscopic description of lung infarction:
Variants of answer:
a) dark red, triangular in shape;
b) often in the lung apex;

c) irregular shape, dark red;
d) concrete-like consistency;
e) round.

60. Specify the microscopic difference between lung infarction and preserved tissue:

Variants of answer:
a) zone of edema, hemorrhage;
b) zone of demarcation inflammation;
c) zone of necrosis, congestion;
d) proliferation of connective tissue;
e) lymphomacrophage infiltrate.

61. Specify an unfavorable outcome of lung infarction:

Variants of answer:
a) aseptic autolysis;
b) thromboembolic complications;
c) sclerosis;
d) suppurative liquefaction;
e) amyloidosis.

62. Specify a favorable outcome of lung infarction:

Variants of answer:
a) organization;
b) septic autolysis;
c) cyst formation;
d) abscess formation;
e) pleuritis.

63. Give a macroscopic description of kidney infarction:

Variants of answer:
a) red;
b) red with a white border;
c) irregular shape;
d) triangular;
e) round.

64. Give a macroscopic description of spleen infarction:

Variants of answer:
a) regular shape;
b) fibrous deposits on the capsule;
c) triangular shape;
d) white in color;
e) red in color.

7. INFLAMMATION

Choose one correct variant of answer

1. Name the main cells in the focus of exudative inflammation:
Variants of answer:
a) polymorphonuclear leukocytes;
b) lymphocytes;
c) monocytes;
d) labrocytes;
e) histiocytes.

2. Enumerate the stages of exudative tissue reaction:
Variants of answer:
a) microcirculatory vessel reaction with impaired blood rheological properties;
b) increased vascular permeability at the level of microcirculatory vessels;
c) exit of blood formed elements into the focus of exudative inflammation;
d) all answers are correct;
e) all answers are incorrect.

3. Name the mediators of plasma origin:
Variants of answer:
a) Kallikrein-kinin system;
b) Blood coagulation and anticoagulation systems;
c) Complement system;
d) Kallikrein-kinin system + Blood coagulation and anticoagulation systems + Complement system;
e) Kallikrein-kinin system + Blood coagulation and anticoagulation systems.

4. Inflammatory cell mediators include all of the following except:
Variants of answer:
a) interleukins I;
b) interleukins II;
c) fibrocytes;
d) labrocytes;
e) collagen.

5. Name the cells predominant in purulent exudate:
Variants of answer:
a) fibroblasts;
b) erythrocytes;
c) leukocytes;
d) macrophages;
e) plasma cells.

6. Name the type of purulent inflammation:

Variants of answer:

a) catarrhal;
b) croupy;
c) abscess;
d) putrid;
e) diphtheritic.

7. Name the tissue changes in the focus of purulent inflammation:

Variants of answer:

a) sclerosis;
b) dystrophy;
c) liquefaction;
d) hypertrophy;
e) atrophy.

8. Localization of foci of inflammation in embolic purulent nephritis:

Variants of answer:

a) cortex, pyramids;
b) calices;
c) pelvis;
d) perinephric connective tissue;
e) capsule.

9. Specify the shape and color of the foci in the kidney in embolic purulent nephritis:

Variants of answer:

a) red, round;
b) gray, triangular;
c) yellow, round;
d) red, triangular;
e) yellow, triangular.

10. In the center of the foci in embolic purulent nephritis, the following pathological process is found:

Variants of answer:

a) sclerosis;
b) atrophy;
c) tumor;
d) fibrin;
e) tissue necrosis.

11. Name the disease in which embolic purulent nephritis occurs:

Variants of answer:

a) angina;

b) septicemia;

c) dystrophy;

d) heart defect;

e) septicemia.

12. Name the changes in the vessels of the interalveolar septa in croupous pneumonia:

Variants of answer:

a) empty;

b) collapsed;

c) congested;

d) sclerosed;

e) contain emboli.

13. The composition of exudate in the alveoli in croupous pneumonia includes all of the following except:

Variants of answer:

a) erythrocytes;

b) fibrin;

c) leukocytes;

d) necrotized alveolar epithelium;

e) labrocytes.

14. Name the nature of pleural inflammation in croupous pneumonia:

Variants of answer:

a) normal appearance;

b) sclerosed;

c) mucosal inflammation;

d) croupous inflammation;

e) catarrhal inflammation.

15. Name the stethoacoustic phenomenon that occurs in croupous pneumonia:

Variants of answer:

a) weakened breath sounds;

b) accentuation of the first tone over the aorta;

c) noise in the projection of the aorta;

d) pleural friction sound;

e) dry rales.

16. The composition of exudate in fibrinous inflammation includes:

Variants of answer:

a) fibrin;

b) polymorphonuclear leukocytes;

c) labrocytes;

d) fibrin and polymorphonuclear leukocytes;

e) transudate.

17. In fibrinous inflammation on serous membranes, the following is determined:

Variants of answer:

a) demarcation line;

b) abscess;

c) empyema;

d) fibrinous plaque;

e) sequestrum.

18. Name the type of fibrinous inflammation:

Variants of answer:

a) abscess;

b) phlegmon;

c) catarrhal;

d) diphtheritic;

e) mixed.

19. The type of fibrinous inflammation on mucous membranes is determined by:

Variants of answer:

a) the number of vessels;

b) depth of necrosis, type of epithelium;

c) features of organ stroma;

d) location in the parenchymatous organ;

e) stage of the disease.

20. Specify the type of fibrinous inflammation that occurs on serous membranes:

Variants of answer:

a) catarrhal;

b) diphtheritic;

c) phlegmonous;

d) serous;

e) croupous.

21. Localization of catarrhal inflammation:

Variants of answer:

a) organ stroma;

b) serous membranes;

c) liver parenchyma;

d) mucous membranes;

e) organ capsules.

22. Mechanism of formation of the liquid part of exudate in exudative inflammation:

Variants of answer:

a) thixotropy;

b) phagocytosis;

c) atrophy;

d) pinocytosis;

e) sclerosis.

23. Mechanism of emigration of polymorphonuclear leukocytes in exudative inflammation:

Variants of answer:

a) transendothelial;

b) pinocytosis;

c) phagocytosis;

d) intraendothelial;

e) chemotaxis.

24. The types of exudative inflammation, depending on the nature of the exudate, include all of the following except:

Variants of answer:

a) purulent;

b) fibrinous;

c) serous;

d) catarrhal;

e) fibrous.

25. In diphtheritic inflammation, the exudate is:

Variants of answer:

a) purulent;

b) putrid;

c) serous;

d) fibrinous;

e) fibrous.

26. In diphtheritic inflammation of the tonsils, it is determined by:
Variants of answer:
a) pus;
b) transudate;
c) capsule;
d) fibrinous plaque;
e) sclerosis.

27. Define the concept of "inflammation":
Variants of answer:
a) inflammation is a vascular-mesenchymal tissue response to injury;
b) inflammation is the restoration of lost structures;
c) inflammation is uncontrolled cell growth;
d) inflammation is hyperplasia of cellular ultrastructures;
e) inflammation is the circulation of foreign bodies in the bloodstream.

28. Name the phases of inflammation:
Variants of answer:
a) alteration;
b) exudation;
c) proliferation;
d) all answers are correct;
e) all answers are incorrect.

29. Type of inflammation depending on the predominance of the phase:
Variants of answer:
a) alterative;
b) alternative;
c) proliferative;
d) recurrent;
e) chronic.

30. Morphological manifestation of alteration:
Variants of answer:
a) sclerosis;
b) atrophy;
c) necrosis;
d) hyalinosis;
e) fibrosis.

31. In dysentery in the rectum, the type of fibrinous inflammation is:
Variants of answer:
a) putrid;
b) catarrhal;

c) croupous;
d) diphtheritic;
e) purulent.

32. Specify the factor that is significant in the development of diphtheritic inflammation in dysentery:

Variants of answer:
a) damaging agent;
b) hyperemia;
c) action of toxins;
d) type of epithelium;
e) temperature effect.

33. The reason for the formation of cavities in tissues in purulent inflammation is:

Variants of answer:
a) due to sclerosis;
b) due to vascularization;
c) due to histolysis;
d) due to congestion;
e) due to trauma.

34. Name the type of inflammation on the epicardium in uremia:

Variants of answer:
a) purulent;
b) putrid;
c) fibrinous;
d) hemorrhagic;
e) catarrhal.

35. Figurative name for the heart in chronic renal failure:

Variants of answer:
a) tiger;
b) bull;
c) giant;
d) droplet;
e) hairy.

36. Type of inflammation in the stomach and intestines in chronic renal failure:

Variants of answer:
a) putrid;
b) purulent;
c) serous-hemorrhagic;

d) catarrhal;
e) productive.

37. Type of exudative inflammation in the kidneys in septicemia:
Variants of answer:
a) productive;
b) serous;
c) hemorrhagic;
d) purulent;
e) fibrinous.

38. Variety of exudative inflammation in the pleural cavity in septicemia:
Variants of answer:
a) furuncle;
b) phlegmon;
c) empyema;
d) carbuncle;
e) panniculitis.

39. Predominant (cellular) composition of purulent exudate:
Variants of answer:
a) fibroblasts;
b) lymphocytes;
c) macrophages;
d) leukocytes;
e) labrocytes.

40. Type of exudative inflammation on serous membranes in acute appendicitis:
Variants of answer:
a) serous-catarrhal;
b) serous-hemorrhagic;
c) purulent;
d) putrid;
e) fibrinous.

41. Type of fibrinous inflammation on serous membranes in acute appendicitis:
Variants of answer:
a) diphtheritic;
b) serous-hemorrhagic;
c) croupous;
d) productive;
e) purulent.

42. Type of exudative inflammation in the wall of the appendix in acute appendicitis:

Variants of answer:

a) putrid;
b) necrotic;
c) petechial;
d) purulent;
e) fibrinous.

43. The subcutaneous fatty tissue is diffusely saturated with greenish-gray liquid, with areas of tissue liquefaction. Name the type of exudative inflammation:

Variants of answer:

a) serous;
b) catarrhal;
c) purulent;
d) hemorrhagic;
e) mucous.

44. Name one of the signs of inflammation:

Variants of answer:

a) cyanosis;
b) hyperemia;
c) pallor;
d) lowering of temperature;
e) organ function is not impaired.

45. Name hormones that can be classified as anti-inflammatory:

Variants of answer:

a) somatotropic;
b) deoxycorticosterone;
c) aldosterone;
d) glucocorticoids;
e) prolactin.

46. Define the term "phlegmon":

Variants of answer:

a) diffuse purulent inflammation;
b) accumulation of pus in a body cavity;
c) localized purulent inflammation;
d) hematogenous spread of pus;
e) pleural inflammation.

47. For solid phlegmon, the presence of this characteristic is typical:

Variants of answer:

a) sclerosis;
b) necrosis;
c) petrification;
d) ossification;
e) cyst formation.

48. Define the term "cellulitis":

Variants of answer:

a) phlegmon of the subcutaneous fatty tissue;
b) subcutaneous tissue edema;
c) localized purulent inflammation;
d) inflammation of the meninges;
e) gingival inflammation.

49. Indicate the peculiarity of the inflammatory reaction in newborns:

Variants of answer:

a) tendency to limitation;
b) rapid recovery;
c) generalization of the process;
d) tendency to abscess formation;
e) lack of hyperemia.

50. Name the type of chronic catarrh:

Variants of answer:

a) serous;
b) mucous;
c) purulent;
d) atrophic;
e) hemorrhagic.

51. Name a complication of purulent inflammation:

Variants of answer:

a) sclerosis;
b) amyloidosis;
c) hyalinosis;
d) petrification;
e) stone formation.

52. The most common outcome of fibrinous inflammation in serous membranes:

Variants of answer:

a) organization with adhesion formation;

b) empyema;
c) gangrene;
d) purulent liquefaction;
e) infarction.

53. Name the type of inflammation depending on etiology:
Variants of answer:
a) acute;
b) exudative;
c) chronic;
d) specific;
e) alterative.

54. Give the name to the layer of an abscess that produces pus:
Variants of answer:
a) granulation tissue;
b) pus cells;
c) pyogenic membrane;
d) sinus fistulas;
e) acute abscesses.

55. The most common cause of aseptic purulent inflammation:
Variants of answer:
a) staphylococci;
b) purulent microorganisms;
c) Mycobacterium tuberculosis;
d) fungi;
e) chemical substances.

56. Accumulation of serous exudate in the pleural cavity can lead to:
Variants of answer:
a) lung gangrene;
b) lung infarction;
c) lung collapse;
d) lobar pneumonia;
e) lung abscess.

57. Name the type of exudative inflammation that has only an acute course:
Variants of answer:
a) putrefactive;
b) hemorrhagic;
c) purulent;
d) fibrinous;
e) catarrhal.

58. Name the phase of the exudation stage:

Variants of answer:

a) blood sequestration;

b) increased vascular permeability;

c) thromboembolus formation;

d) blood deposition;

e) cellular infiltrate formation.

59. Name a feature that is not characteristic of inflammation:

Variants of answer:

a) fever;

b) cyanosis;

c) organ enlargement;

d) pain;

e) functional impairment.

60. Name the morphological type of necrosis characteristic of specific inflammation:

Variants of answer:

a) colliquative;

b) caseous;

c) gangrene;

d) waxy;

e) fibrinoid.

61. Give the definition of "productive inflammation":

Variants of answer:

a) inflammation characterized by severe tissue damage;

b) inflammation characterized by the formation of purulent exudate;

c) inflammation characterized by the formation of fibrinous exudate;

d) inflammation characterized by the proliferation of histiocytic and hematogenous cells;

e) a process characterized by the proliferation of epithelial elements.

62. Name the clinico-anatomical feature of productive inflammation:

Variants of answer:

a) acute course;

b) predominance of productive tissue reaction;

c) predominance of exudative tissue reaction;

d) outcome – death;

e) outcome – resorption.

63. Name the type of tissue reaction that predominates in productive inflammation:

Variants of answer:

a) exudation;
b) sclerosis;
c) proliferation;
d) alteration;
e) destruction.

64. Give a characterization of the proliferation phase:

Variants of answer:

a) tissue damage;
b) circulatory disturbance;
c) phagocytosis;
d) cell proliferation in the inflammation zone;
e) exudate formation.

65. List the cells involved in phagocytosis:

Variants of answer:

a) neutrophils, macrophages;
b) lymphocytes;
c) histiocytes;
d) erythrocytes;
e) eosinophils.

66. Name the types of phagocytosis in areas of productive inflammation:

Variants of answer:

a) pinocytosis;
b) cytopemphysis;
c) incomplete, complete;
d) endocytobiosis;
e) correct answer not present.

67. Origin of cells in the inflammatory infiltrate:

Variants of answer:

a) hematogenous;
b) lymphogenous;
c) neurogenic;
d) histogenic;
e) embryonic.

68. Name cells of histogenic origin in areas of productive inflammation:

Variants of answer:

a) endothelial, fibroblasts;

b) lymphocytes;
c) eosinophils;
d) macrophages;
e) monocytes.

69. Name cells of hematogenous origin in areas of productive inflammation:
Variants of answer:
a) endothelial;
b) lymphocytes, monocytes, macrophages;
c) fibroblasts;
d) histiocytes;
e) adventitial.

70. Types of cellular infiltrate in areas of productive inflammation, all listed except:
Variants of answer:
a) focal, diffuse;
b) giant cell, plasma cell;
c) neutrophilic, fibrinous;
d) macrophage, epithelioid cell;
e) polymorphonuclear.

71. Name the characteristic outcome of productive inflammation:
Variants of answer:
a) sepsis;
b) tissue liquefaction;
c) sclerosis;
d) ulceration;
e) formation of fistulas.

72. Name types of productive inflammation:
Variants of answer:
a) interstitial;
b) granulomatous;
c) polyps, acute condylomas;
d) all answers are correct;
e) all answers are incorrect.

73. Name the type of productive inflammation that develops in the myocardium in syphilis:
Variants of answer:
a) interstitial;
b) granulomatous, specific;
c) granulomatous, nonspecific;

d) polypoid;
e) condylomatosis.

74. Name the type of productive inflammation that develops in the myocardium in rheumatism:

Variants of answer:
a) interstitial;
b) granulomatous, nonspecific;
c) parenchymal;
d) polypoid;
e) condyloma.

75. Name the type of productive inflammation that develops in the brain in typhoid fever:

Variants of answer:
a) interstitial;
b) granulomatous, nonspecific;
c) intermediate;
d) polypoid;
e) condylomatosis.

76. Name the type of productive inflammation that develops on glandular epithelium:

Variants of answer:
a) interstitial;
b) granulomatous;
c) intermediate;
d) polypoid;
e) condylomatosis.

77. Name the type of productive inflammation that is characteristic of rabies:

Variants of answer:
a) interstitial;
b) granulomatous, nonspecific;
c) intermediate;
d) polypoid;
e) granulomatous, specific.

78. Name the type of productive inflammation that develops in the liver in tuberculosis:

Variants of answer:
a) interstitial;
b) granulomatous, nonspecific;
c) intermediate;

d) polypoid;
e) granulomatous, specific.

79. Name the type of productive inflammation that develops in the liver in alveococcosis:

Variants of answer:
a) interstitial;
b) granulomatous, specific;
c) granulomatous, nonspecific;
d) polypoid;
e) condylomatosis.

80. Name the type of productive inflammation that is characteristic of syphilis:

Variants of answer:
a) interstitial;
b) granulomatous, specific;
c) granulomatous, nonspecific;
d) polypoid;
e) condylomatosis.

81. Name the type of productive inflammation that is characteristic of leprosy:

Variants of answer:
a) interstitial;
b) granulomatous, specific;
c) granulomatous, nonspecific;
d) polypoid;
e) condylomatosis.

82. Name the type of productive inflammation that is characteristic of scleroderma:

Variants of answer:
a) interstitial;
b) granulomatous, specific;
c) granulomatous, nonspecific;
d) polypoid;
e) condylomatosis.

83. Name the type of productive inflammation that develops around foreign bodies:

Variants of answer:
a) interstitial;
b) granulomatous, specific;

c) granulomatous, nonspecific;
d) polypoid;
e) condylomatosis.

84. Characteristics of intermediate inflammation:
Variants of answer:
a) diffuse cellular infiltrate in subcutaneous adipose tissue;
b) focal cellular infiltrate in subcutaneous adipose tissue;
c) focal or diffuse cellular infiltrate in the stroma of parenchymal organs;
d) diffuse cellular infiltrate in the cells of parenchymal organs;
e) diffuse cellular infiltrate in the stroma of hematopoietic organs.

85. Features of intermediate inflammation:
Variants of answer:
a) predominance of productive tissue reaction;
b) focal cellular infiltrate in the stroma of parenchymal organs;
c) diffuse cellular infiltrate in the stroma of parenchymal organs;
d) all answers are correct;
e) all answers are incorrect.

86. Name the macroscopic sign of interstitial inflammation:
Variants of answer:
a) macroscopically the organs are unchanged;
b) macroscopically the organs are grossly deformed;
c) small abscesses in the stroma of parenchymal organs;
d) diffuse cellular infiltrate in the stroma of parenchymal organs;
e) focal erythrocyte infiltrates in the stroma of parenchymal organs.

87. Name the organs in which interstitial inflammation most commonly develops:
Variants of answer:
a) spleen, lymph node;
b) brain, skin;
c) heart, lungs, liver;
d) skeletal muscle;
e) stomach, intestine.

88. Specify the characteristic outcome of interstitial inflammation:
Variants of answer:
a) edema;
b) infarction;
c) necrosis;
d) sclerosis;
e) amyloidosis.

89. Specify the characteristic outcome of interstitial productive myocarditis:

Variants of answer:

a) large focal cardiosclerosis;

b) myocardial infarction;

c) cardiomyopathy;

d) small focal diffuse cardiosclerosis;

e) amyloidosis.

90. Give the definition of the term "granuloma":

Variants of answer:

a) a nodule composed of aggregates of eosinophils;

b) syphilid;

c) a nodule composed of a collection of neutrophils;

d) a nodule composed of aggregates of cells of the mononuclear-macrophage system;

e) a nodule composed of aggregates of basophils.

91. Indicate the variety of granulomatous processes depending on the pathogenesis:

Variants of answer:

a) immune;

b) acute;

c) subacute;

d) chronic;

e) recurrent.

92. The cells participating in cellular cooperation in an immune granuloma are listed correctly, except for:

Variants of answer:

a) lymphocytes;

b) macrophages;

c) epithelioid cells;

d) erythrocytes;

e) fibroblasts.

93. Name the cells that predominate in a non-immune granuloma:

Variants of answer:

a) a large number of basophils;

b) eosinophils;

c) labrocytes;

d) giant cells of foreign bodies;

e) plasma cells.

94. Name the acute infectious diseases that lead to granulomatous inflammation:

Variants of answer:

a) typhoid fever;

b) paratyphoid fever;

c) rabies;

d) all answers are correct;

e) none of the answers are correct.

95. Name the features of granulomas that develop around animal parasites:

Variants of answer:

a) accumulation of neutrophils;

b) extensive necrosis;

c) prevalence of giant cells of foreign bodies;

d) prevalence of Langhans giant cells;

e) prevalence of basophils.

96. Name the feature of granulomas that develop around foreign bodies:

Variants of answer:

a) exudative tissue reaction;

b) productive tissue reaction;

c) abscess formation;

d) prevalence of Langhans giant cells;

e) prevalence of Touton giant cells.

97. Name the type of phagocytosis that develops in granulomas in chronic infectious diseases:

Variants of answer:

a) incomplete;

b) incomplete;

c) complete;

d) endocytobiosis;

e) pinocytosis.

98. Name the changes in the liver that are characteristic of a multilocular echinococcus:

Variants of answer:

a) reduction in the size of the liver;

b) flabby consistency;

c) non-specific granulomatous inflammation develops around the parasite;

d) exudative tissue reaction develops around the parasite;

e) specific granulomatous inflammation develops around the parasite.

99. The peculiarity of the outcome of inflammation around animal parasites:

Variants of answer:

a) alteration;

b) exudation;

c) encapsulation, petrification;

d) hyalinosis;

e) amyloidosis.

100. Name the condition of the body that is accompanied by the development of a productive reaction in specific inflammation:

Variants of answer:

a) weak resistance of the body;

b) anergy;

c) persistent immunity;

d) relative resistance of the body to the pathogen;

e) immunodeficiency.

101. Name the cells that predominate in a tuberculous granuloma:

Variants of answer:

a) neutrophils;

b) fibroblasts, plasma cells;

c) Langhans cells, epithelioid cells, lymphoid cells;

d) Virchow cells;

e) Mikulicz cells.

102. Give a microscopic characteristic of a tuberculous granuloma:

Variants of answer:

a) absence of vessels and collagen fibers;

b) caseous necrosis in the center of the granuloma;

c) a large number of epithelioid cells;

d) lymphocytes, Langhans giant cells;

e) all of the above are correct.

103. Name the type of necrosis that is characteristic of inflammation in tuberculosis:

Variants of answer:

a) waxy;

b) infarction;

c) gangrene;

d) liquefactive;

e) caseous.

104. Name the type of tuberculous granuloma when the alteration stage predominates:

Variants of answer:

a) epithelioid-cell;
b) necrotic;
c) lymphoid-cell;
d) giant-cell;
e) polymorphic-cell.

105. Name the tissue reaction that is characteristic of tuberculosis in the presence of immunity:

Variants of answer:

a) alterative;
b) productive;
c) exudative;
d) necrotic;
e) alterative-exudative.

106. Name the type of tissue reaction when the body is highly sensitive to Mycobacterium tuberculosis:

Variants of answer:

a) productive-necrotic;
b) productive;
c) mixed;
d) alterative-exudative;
e) productive-infiltrative.

107. The most common location of a solitary (single) gumma:

Variants of answer:

a) stomach;
b) intestine;
c) aorta;
d) brain;
e) bones.

108. Name the stage of syphilis in which the productive-necrotic reaction predominates:

Variants of answer:

a) primary stage;
b) early congenital syphilis;
c) secondary stage;
d) tertiary syphilis;
e) late congenital.

109. Morphological expression of tertiary syphilis:
Variants of answer:
a) gummas in internal organs;
b) hard chancre;
c) leukocytic infiltration of vessels;
d) syphilids;
e) white pneumonia.

110. Macroscopic appearance of the aortic intima in syphilitic mesoaortitis:
Variants of answer:
a) striated;
b) glazed;
c) appearance of shagreen skin;
d) smooth;
e) greasy.

111. Characteristics of syphilitic mesoaortitis:
Variants of answer:
a) involvement of the inner membrane;
b) exudative tissue reaction;
c) involvement of the outer and middle membranes of the aorta;
d) main changes occur in the abdominal aorta;
e) there are never any changes in the aortic arch.

112. Name the segments of the aorta affected in tertiary syphilis:
Variants of answer:
a) abdominal segment;
b) aortic bifurcation;
c) ascending part of the thoracic segment of the aorta, aortic arch;
d) descending part of the thoracic segment of the aorta;
e) all answers are correct.

113. Specify the condition of vasavasorum in syphilitic mesoaortitis:
Variants of answer:
a) unchanged;
b) full-blooded;
c) asleep;
d) thrombosed;
e) productive vasculitis.

114. Specify a possible complication of syphilitic mesoaortitis:
Variants of answer:
a) mitral valve defect;
b) cardiosclerosis;

c) aortic arch aneurysm;
d) abdominal aortic aneurysm;
e) tricuspid valve defect.

115. Name the cause of death in patients with syphilitic mesoaortitis:
Variants of answer:
a) myocardial infarction;
b) rupture of the thoracic aorta aneurysm;
c) rupture of the abdominal aorta aneurysm;
d) adrenal insufficiency;
e) bleeding in the brain.

116. Name the disease in which Mikulich cells are found in the granuloma:
Variants of answer:
a) tuberculosis;
b) syphilis;
c) leprosy;
d) skleroma;
e) glanders.

117. Name the granuloma in which Virchow's cells are found:
Variants of answer:
a) in tuberculosis;
b) in syphilis;
c) in leprosy;
d) in skleroma;
e) in glanders.

8. TISSUE REPAIR, REGENERATION AND ADAPTATION

Choose one correct variant of answer

1. Give the definition of the concept of "adaptation":
Variants of answer:
a) transition of one type of tissue to another;
b) sclerosis;
c) life processes aimed at preserving the species;
d) reduction in the mass of an organ;
e) false hypertrophy.

2. Give the definition of the concept of "compensation":
Variants of answer:
a) restoration of tissue in place of lost tissue;
b) life processes aimed at preserving the species;
c) increase in the mass of an organ;
d) individual reactions aimed at restoring impaired function;
e) metaplasia.

3. Give the definition of the concept of "regeneration":
Variants of answer:
a) transition of one type of tissue to another;
b) increase in the volume of cells, tissues, organs;
c) replacement of the focus of necrosis with connective tissue;
d) restoration of the structure of tissue elements instead of the deceased;
e) reduction in the volume of cells.

4. Give the definition of the concept of "hypertrophy":
Variants of answer:
a) tissue necrosis;
b) restoration of tissue in place of lost tissue;
c) reduction in the volume of cells;
d) replacement by connective tissue;
e) enlargement of the volume of cells, tissues, organs.

5. Give the definition of the concept of "hyperplasia":
Variants of answer:
a) reduction in the volume of cells, tissues;
b) stroma overgrowth in place of parenchyma;
c) restoration of tissue in place of lost tissue;
d) enlargement of the number of structural elements of tissue, cells;
e) reduction in the number of structural elements of tissue, cells.

6. Give the definition of the concept of "atrophy":
Variants of answer:
a) reduction of fat;
b) restoration of tissue in place of lost tissue;
c) sclerosis;
d) in-life reduction in the size of organs, tissues, cells;
e) transition of one type of tissue to another.

7. Name the phase of the development of compensatory-adaptive processes:
Variants of answer:
a) phase of hyperemia;
b) phase of normalization;

c) phase of subsidence;
d) phase of exhaustion;
e) phase of organization.

8. Name a compensatory-adaptive process:
Variants of answer:
a) inflammation;
b) regeneration;
c) hyperemia;
d) dystrophy;
e) tumor.

9. Morphological changes in decompensation of cardiac activity are listed correctly, except for:
Variants of answer:
a) brown atrophy of the myocardium;
b) fatty degeneration of the myocardium;
c) heart obesity;
d) accumulation of lipofuscin;
e) metastatic calcification.

10. Name the type of wound healing:
Variants of answer:
a) adhesion;
b) autogenous regeneration;
c) metaplasia;
d) through secondary intention;
e) inflammation.

11. Name the type of pathological regeneration:
Variants of answer:
a) hyporegeneration;
b) hypertrophy;
c) amyloidosis;
d) hemochromatosis;
e) aregeneration.

12. Name the process related to pathological regeneration:
Variants of answer:
a) compensatory hypertrophy;
b) metaplasia;
c) atrophy;
d) amyloidosis;
e) sclerosis.

13. List the types of regeneration:

Variants of answer:

a) physiological;
b) youthful;
c) senile;
d) reparative;
e) physiological and reparative.

14. List the types of reparative regeneration:

Variants of answer:

a) complete (restitution);
b) completed;
c) pathological;
d) incomplete (substitution);
e) complete (restitution) and incomplete (substitution).

15. Name the morphological form of regeneration:

Variants of answer:

a) cellular;
b) vicarious;
c) atrophy;
d) complex;
e) simple.

16. Morphological characteristics of the regeneration process in the heart during myocardial infarction:

Variants of answer:

a) formation of scar in the infarct area;
b) narrowing of the cavities;
c) proliferation of adipose tissue in the epicardium;
d) formation of heart defect;
e) pathological hypertrophy.

17. Name the cells where only intracellular regeneration occurs:

Variants of answer:

a) hepatocytes;
b) nephrocytes;
c) cardiomyocytes;
d) epidermis;
e) endothelium.

18. Ways of implementing regenerative hypertrophy:

Variants of answer:

a) sclerosis;

b) hyperplasia of cells;
c) atrophy;
d) hyperplasia of cell ultrastructures;
e) hyperplasia of cells and ultrastructures of cells.

19. Path of implementing regenerative hypertrophy in the myocardium:
Variants of answer:
a) stroma proliferation;
b) hyperplasia of cell ultrastructures;
c) proliferation of adipose tissue in the epicardium;
d) dilatation of cavities;
e) narrowing of cavities.

20. Path of implementing regenerative hypertrophy in the liver:
Variants of answer:
a) hyperplasia of cells;
b) stroma proliferation;
c) hepatocyte dystrophy;
d) hypoplasia of cell ultrastructures;
e) cirrhosis formation.

21. Type of regeneration to which changes in the surviving myocardium during infarction belong:
Variants of answer:
a) substitution;
b) regenerative hypertrophy;
c) regenerative hyperplasia;
d) mixed;
e) metaplasia.

22. Macroscopic characteristics of myocardial hypertrophy:
Variants of answer:
a) decrease in heart size;
b) increase in fat under the epicardium;
c) enlargement of heart size;
d) sharp vascular congestion;
e) twisting of blood vessels.

23. Name the process that occurs with true organ hypertrophy:
Variants of answer:
a) proliferation of adipose tissue;
b) stroma proliferation;
c) enlargement of parenchymal mass;

d) sclerosis of the capsule;
e) reduction in organ volume.

24. Signs of eccentric hypertrophy of the myocardium:
Variants of answer:
a) heart cavities of normal size;
b) narrowing of heart cavities;
c) decrease in fat in the epicardium;
d) fatty degeneration of cardiomyocytes;
e) correct answer not present.

25. Give the definition of the concept of "restitution":
Variants of answer:
a) incomplete regeneration;
b) compensation of a defect with tissue identical to the one that perished;
c) replacement of a defect with a scar;
d) regenerative hypertrophy;
e) stroma proliferation.

26. Give the definition of the concept of "substitution":
Variants of answer:
a) incomplete regeneration;
b) compensation of a defect with tissue identical to the one that perished;
c) replacement of a defect with fat;
d) complete regeneration;
e) brown atrophy.

27. All of the following are types of hypertrophy (hyperplasia) based on the mechanism of origin, except:
Variants of answer:
a) working;
b) mixed;
c) neurohumoral;
d) vicarious;
e) hypertrophic overgrowths.

28. Microscopic signs of myocardial hypertrophy are listed correctly, except:
Variants of answer:
a) increase in the size of cardiomyocytes;
b) enlargement of the number of cardiomyocytes;
c) increase in the size of nuclei of cardiomyocytes;
d) increase in the amount of stroma;
e) correct answer not present.

29. Give the definition of the concept of "vicarious hypertrophy":

Variants of answer:

a) hypertrophy of one of the paired organs after the removal of the second;

b) hypertrophy of an organ with increased workload;

c) hypertrophy of an organ with replacement of part of it with scar tissue;

d) neurohumoral hypertrophy;

e) hypertrophic overgrowths.

30. Name the organ in which the development of vicarious hypertrophy is possible:

Variants of answer:

a) liver;

b) pituitary gland;

c) spleen;

d) kidney;

e) testes.

31. Pathway of regenerative hypertrophy:

Variants of answer:

a) phagocytosis;

b) atrophy;

c) hyperplasia of cells;

d) metaplasia;

e) sclerosis.

32. Microscopic characteristics of cardiomyocytes around the post-infarction scar:

Variants of answer:

a) regenerative hypertrophy;

b) regenerative hyperplasia;

c) brown atrophy;

d) fatty degeneration;

e) necrosis.

33. Name the staining used to identify scar tissue in the myocardium and the result of the staining:

Variants of answer:

a) sudan III, blue color;

b) sudan IV, yellow color;

c) Congo red, red color;

d) picrofuchsin according to Van Gieson, red-orange color;

e) gentian violet, lilac color.

34. Electron microscopic characteristics of hypertrophied cardiomyocytes in the stage of stable compensation:

Variants of answer:

a) increase in the number of myofilaments;
b) increase in the number of mitochondria;
c) increase in the size of mitochondria;
d) all answers are correct;
e) all answers are incorrect.

35. Composition of inclusions in the cytoplasm of cardiomyocytes in decompensation:

Variants of answer:

a) fat;
b) glycogen;
c) amyloid;
d) hemosiderin;
e) myoglobin.

36. Name the mechanism of development of glandular hyperplasia of the endometrium:

Variants of answer:

a) working;
b) hypertrophic overgrowths;
c) neurohumoral;
d) vicarious;
e) mixed.

37. Microscopic signs of glandular hyperplasia of the endometrium are listed correctly, except:

Variants of answer:

a) thickening of the endometrium;
b) thinning of the endometrium;
c) glands of convoluted shape;
d) cystically stretched glands;
e) hyperplasia of stromal cells.

38. Name the pathological process detected in the heart of a patient with rheumatic heart disease who died of heart failure:

Variants of answer:

a) concentric hypertrophy of the heart;
b) eccentric hypertrophy of the heart;
c) hairy heart;
d) hyalinosis of the myocardium;
e) fatty heart.

39. Name the organ that undergoes compensatory hypertrophy in prostate adenoma:

Variants of answer:

a) kidney;
b) ureter;
c) testes;
d) bladder;
e) urethra.

40. Name the process of organization:

Variants of answer:

a) amyloidosis;
b) dystrophy;
c) hyperplasia;
d) scar formation;
e) metaplasia.

41. The most common localization of a scar in the myocardium:

Variants of answer:

a) right ventricle;
b) left ventricle;
c) right atrium;
d) left atrium;
e) trabecula of the right ventricle.

42. Type of bronchial epithelium formed during metaplasia:

Variants of answer:

a) ciliated;
b) glandular;
c) cylindrical;
d) multilayered squamous;
e) transitional.

43. Name the background process in the bronchi as a result of which epithelial metaplasia occurs:

Variants of answer:

a) chronic bronchitis;
b) tumor;
c) injuries;
d) necrosis;
e) cysts.

44. Name the pathological process often occurring against the background of epithelial metaplasia:

Variants of answer:

a) inflammation;
b) necrosis;
c) cancer;
d) amyloidosis;
e) dystrophy.

45. Correctly listed types of local atrophy, except:

Variants of answer:

a) dysfunctional;
b) due to insufficient blood supply;
c) due to pressure;
d) oncological;
e) under the influence of physical and chemical factors.

46. Name a synonym for general atrophy:

Variants of answer:

a) obesity;
b) cachexia;
c) brown atrophy;
d) necrosis;
e) dwarfism.

47. Name the pathological process that develops in the brain with obstruction of cerebrospinal fluid outflow:

Variants of answer:

a) meningitis;
b) encephalitis;
c) hydrocephalus;
d) edema;
e) swelling.

48. Name the type of atrophy depending on its prevalence:

Variants of answer:

a) simple;
b) complete;
c) partial;
d) complex;
e) local.

49. Give an example of dysfunctional atrophy:
Variants of answer:
a) brown atrophy of the lungs;
b) brown atrophy of the myocardium;
c) cachexia of the optic nerve after eye removal;
d) muscle atrophy with motor neuron death;
e) cortical atrophy of the brain in atherosclerosis.

50. Signs of brown atrophy of the myocardium:
Variants of answer:
a) twisted course of vessels;
b) accumulation of lipofuscin in cells;
c) reduction of heart mass;
d) all answers are correct;
e) all answers are incorrect.

51. When obstructed urine outflow in the kidneys, the development of:
Variants of answer:
a) hydrocephalus;
b) shrunken kidney;
c) hydronephrosis;
d) pyelonephritis;
e) glomerulonephritis.

52. Name the type of atrophy to which hydronephrosis can be attributed:
Variants of answer:
a) due to insufficient blood circulation;
b) general;
c) dysfunctional;
d) neurotic;
e) due to pressure.

53. Microscopic characteristic of brown atrophy of the liver:
Variants of answer:
a) deformation;
b) fatty infiltration;
c) lipofuscin in hepatocytes;
d) sharp posterior edge;
e) increase in size.

54. Name the organs in which vicarious hypertrophy develops:
Variants of answer:
a) testes;
b) adrenal glands;

c) liver;
d) heart;
e) brain.

55. Name the organs in which brown atrophy occurs:
Variants of answer:
a) spleen;
b) skeletal muscles;
c) kidneys;
d) stomach;
e) lungs.

56. Name the organ undergoing atrophy under conditions of prolonged use of prednisolone:
Variants of answer:
a) testes;
b) ovaries;
c) kidneys;
d) adrenal glands;
e) prostate.

57. Name the organ undergoing atrophy under conditions of prolonged insulin use:
Variants of answer:
a) heart;
b) spleen;
c) testes;
d) pancreatic islets;
e) fundic glands of the stomach.

58. Name the organ that undergoes atrophy when the lumen of the ureter is blocked by a stone:
Variants of answer:
a) bladder;
b) prostate gland;
c) kidney;
d) adrenal gland;
e) urethra.

59. Name the reasons for the development of hydronephrosis:
Variants of answer:
a) blockage of the ureteral lumen by a stone;
b) tumor of the ureter;
c) congenital stricture of the ureter;

d) all answers are correct;
e) all answers are incorrect.

60. Macroscopic signs characteristic of hydronephrosis are listed correctly, except:

Variants of answer:
a) dilation of the pelvis and calyces;
b) enlargement of kidney size;
c) decrease in kidney size;
d) thinning of the layers of the kidney;
e) sclerosis of kidney tissue.

61. Name the type of atrophy that develops in the muscles of the limbs with gradual closure of the femoral artery lumen by an atherosclerotic plaque:

Variants of answer:
a) atrophy due to insufficient blood circulation;
b) dysfunctional;
c) due to inactivity;
d) due to reduced load;
e) neurotic.

62. Name the macroscopic sign of brown atrophy of the liver:

Variants of answer:
a) enlarged sizes;
b) rounded anterior edge;
c) sharp anterior edge;
d) rounded posterior edge;
e) sizes are not changed.

63. Electron microscopic signs of hypertrophied cardiomyocytes in the stage of heart failure decompensation are listed correctly, except:

Variants of answer:
a) increase in the number of myofilaments;
b) increase in the number of mitochondria;
c) increase in the size of mitochondria;
d) breakdown of mitochondria and appearance of lipid inclusions in the cytoplasm;
e) reduction in nuclear size.

64. Name the disorder of lipid metabolism that leads to general atrophy:

Variants of answer:
a) obesity;
b) cachexia;

c) hemochromatosis;
d) fatty degeneration of the myocardium;
e) lipodystrophy.

65. Name the tissue in which metaplasia most frequently occurs:
Variants of answer:
a) nervous;
b) renal;
c) epithelial;
d) cardiac;
e) hematopoietic.

66. Name the regulatory mechanism of regeneration:
Variants of answer:
a) humoral;
b) immunological;
c) nervous;
d) functional;
e) physiological.

67. Pathways of regeneration of small vessels are listed correctly, except:
Variants of answer:
a) budding;
b) branching;
c) division;
d) autogenous neoplasia;
e) heterogeneous neoplasia.

68. Components of granulation tissue are listed correctly, except:
Variants of answer:
a) newly formed small vessels;
b) young mesenchymal cells;
c) fibroblasts;
d) glycogen;
e) hematogenous cells.

69. Give the definition of the term "granulation tissue":
Variants of answer:
a) young, cell-rich connective tissue with thin-walled blood vessels;
b) tissue rich in pigment granules;
c) immature adipose tissue;
d) islets of hematopoietic tissue;
e) coarse-fibered scar tissue.

70. Stages that make up the regeneration of connective tissue are stated correctly, except:

Variants of answer:

a) formation of granulation tissue;

b) proliferation of young mesenchymal elements and formation of microvessels;

c) maturation of granulation tissue;

d) formation of coarse-fibered scar tissue;

e) formation of adipose tissue.

71. Give the definition of the term "keloid":

Variants of answer:

a) excessive formation of collagen fibers with subsequent hyalinosis;

b) accumulation of fat in the scar;

c) appearance of cartilaginous tissue in the scar;

d) marked tissue swelling;

e) insufficient formation of collagen fibers.

72. Provide examples of neurohumoral hypertrophy (hyperplasia):

Variants of answer:

a) glandular hyperplasia of the endometrium;

b) gynecomastia;

c) acromegaly;

d) all answers are correct;

e) all answers are incorrect.

73. Definitions of processes are stated correctly, except:

Variants of answer:

a) regeneration – restoration of structural elements of tissue in place of dead ones;

b) metaplasia – replacement of the focus of necrosis with connective tissue;

c) hypertrophy – increase in the volume of cells, tissues, organs;

d) hyperplasia – increase in the number of structural elements of tissue, cells;

e) atrophy – lifelong reduction in the size of organs, tissues, cells.

74. Name the disease in which the right ventricle of the heart hypertrophies:

Variants of answer:

a) chronic obstructive pulmonary emphysema;

b) chronic glomerulonephritis;

c) aortic heart disease;

d) adenomatous hyperplasia of the prostate;

e) renal artery stenosis.

75. Name the disease in which the left ventricle of the heart hypertrophies:
Variants of answer:
a) chronic obstructive pulmonary emphysema;
b) chronic glomerulonephritis;
c) tricuspid heart disease;
d) adenomatous hyperplasia of the prostate;
e) renal artery stenosis.

76. Name the disease in which the bladder hypertrophies:
Variants of answer:
a) chronic obstructive pulmonary emphysema;
b) chronic glomerulonephritis;
c) aortic heart disease;
d) adenomatous hyperplasia of the prostate;
e) renal artery stenosis.

77. Provide an example of pathological regeneration:
Variants of answer:
a) formation of a scar in the place of a myocardial infarction;
b) regenerative hypertrophy of the lung;
c) formation of excess bone callus;
d) hypertrophy of cardiomyocytes around the scar;
e) hyperplasia of ganglion cell ultrastructures.

9. TUMORS. PART 1

Choose one correct variant of answer

1. The characteristics of a malignant tumor do not include:
Variants of answer:
a) pathological process characterized by cell proliferation;
b) pathological process characterized by uncontrolled cell proliferation;
c) tumor is characterized by a disturbance of differentiation;
d) invasive growth is characteristic;
e) metastasis is characteristic.

2. Types of atypism in a tumor:
Variants of answer:
a) cellular and tissue;
b) biochemical;
c) antigenic;

d) all answers are correct;
e) all answers are incorrect.

3. Secondary changes in tumors do not include:
Variants of answer:
a) inflammation;
b) areas of necrosis;
c) areas of calcification;
d) liquefaction;
e) invasion.

4. Characteristics of the microscopic structure of a tumor:
Variants of answer:
a) tumors are composed of atypical cells;
b) tumors exhibit properties of cellular and tissue atypism;
c) tumors have parenchyma and stroma;
d) tumors exhibit invasive growth;
e) tumors metastasize.

5. Structures represented in the stroma of a tumor:
Variants of answer:
a) connective tissue of the organ;
b) blood vessels;
c) nerve fibers;
d) all answers are correct;
e) all answers are incorrect.

6. Types of morphological atypism:
Variants of answer:
a) complete;
b) incomplete;
c) cellular;
d) tissue;
e) cellular and tissue.

7. Manifestations of tissue atypism in tumors do not include:
Variants of answer:
a) cell polymorphism;
b) disturbance of the ratio of parenchyma and stroma;
c) disturbance of the shape and size of epithelial structures;
d) disturbance of polarity and layering of epithelium;
e) absence of basal membrane in epithelial complexes.

8. Tumors for which only tissue atypism is characteristic:

Variants of answer:

a) for malignant tumors;

b) for benign tumors;

c) for malignant and benign tumors;

d) for mesenchymal tumors;

e) for epithelial tumors.

9. Manifestations of cellular atypism in malignant tumors that can be detected at the light microscopic level:

Variants of answer:

a) cell polymorphism;

b) hyperchromatism of their nuclei;

c) polymorphism of nuclei;

d) all answers are correct;

e) all answers are incorrect.

10. All manifestations of cellular atypism detected at the ultrastructural level are listed correctly except:

Variants of answer:

a) absence of mitochondria in tumor cells

b) change in shape, size, and location of mitochondria

c) change in nuclear membrane

d) multiple arrangement of chromatin under the nuclear envelope

e) damage to membrane contacts between the nucleus, mitochondria, and endoplasmic reticulum.

11. Principles of morphological classification of tumors:

Variants of answer:

a) nosological;

b) histogenetic;

c) histogenetic + by level of differentiation;

d) by level of differentiation;

e) nosological + histogenetic + by level of differentiation.

12. Degree of differentiation of malignant tumors:

Variants of answer:

a) I degree;

b) II degree;

c) III degree;

d) well-differentiated;

e) IV degree.

13. Types of tumors based on their degree of maturity:
Variants of answer:
a) lymphoid tissue tumors;
b) borderline tumors;
c) mesenchymal tumors;
d) epithelial tumors;
e) organ-specific tumors.

14. Types of tumors based on their histogenesis:
Variants of answer:
a) epithelial tumors;
b) mesenchymal tumors;
c) hematopoietic tissue tumors;
d) all answers are correct;
e) all answers are incorrect.

15. Characteristics of tumors with expansive growth:
Variants of answer:
a) invasion into adjacent tissues;
b) formation of a pseudocapsule;
c) formation of vascular loops;
d) necrosis of surrounding tissues;
e) sclerosis of surrounding tissues.

16. Characteristics of appositional growth of a tumor:
Variants of answer:
a) multiple foci of neoplastic transformation;
b) single focus of neoplastic transformation;
c) formation of a capsule;
d) formation of a pseudocapsule;
e) merging of multiple foci of necrosis.

17. Characteristics of infiltrating growth of a tumor:
Variants of answer:
a) growth of the tumor into surrounding tissues;
b) formation of a pseudocapsule around the tumor;
c) formation of a capsule around the tumor;
d) multiplicity of foci of tumor growth;
e) fusion of multiple foci of tumor growth.

18. Theories of the etiology of tumors do not include:
Variants of answer:
a) theory of local cellular synthesis;
b) viral-genetic;

c) physico-chemical;
d) disontogenetic;
e) polyetiological.

19. Principles underlying the morphological classification of epithelial tumors:

Variants of answer:
a) histogenesis;
b) histogenesis;
c) degree of maturity;
d) organ specificity;
e) all listed features.

20. Types of epithelial tumors based on their histogenesis:

Variants of answer:
a) tumors from glandular epithelium;
b) tumors from squamous epithelium;
c) tumors from transitional epithelium;
d) all answers are correct;
e) all answers are incorrect.

21. Benign tumor from squamous and transitional epithelium:

Variants of answer:
a) adenoma;
b) fibroadenoma;
c) polyp;
d) papilloma;
e) condyloma.

22. Papillomas are not found in:

Variants of answer:
a) mucous membrane of the urethra;
b) mucous membrane of the true vocal cords;
c) mucous membrane of the bladder;
d) skin;
e) small intestine.

23. Macroscopic features of papillomas:

Variants of answer:
a) spherical shape;
b) nipple-like surface;
c) does not protrude above the surface;
d) smooth surface;
e) correct answers a, b.

24. Microscopic features of papillomas:
Variants of answer:
a) tissue atypism is present;
b) increased number of layers of epithelium;
c) disturbed polarity of the epithelium and basal membrane;
d) polarity, complexity of the epithelium, and basal membrane are preserved;
e) correct answers a, b, d.

25. Consequences of trauma to papillomas:
Variants of answer:
a) bleeding;
b) ulceration;
c) malignization;
d) inflammation;
e) all answers are correct.

26. Benign tumor from glandular epithelium:
Variants of answer:
a) papilloma;
b) fibroma;
c) adenoma;
d) scleroma;
e) condyloma.

27. Most common localization of adenomas:
Variants of answer:
a) skin;
b) true vocal cords;
c) mucous membrane of the stomach;
d) mucous membrane of the bladder;
e) mucous membrane of the gallbladder.

28. A true tumor includes the following polyp:
Variants of answer:
a) allergic polyp;
b) hyperplastic polyp;
c) adenomatous polyp;
d) sarcoma;
e) melanoma.

29. Macroscopic features of adenoma:
Variants of answer:
a) tumor in the form of a nodule within a capsule;
b) tumor without a capsule;

c) endophytic growth with a stalk;
d) saucer-shaped tumor;
e) tumor in the form of a disc with ulceration in the center.

30. Microscopic features of adenoma include all of the following except:
Variants of answer:
a) has organoid structure;
b) fibrous structure;
c) parenchyma of the tumor is represented by glandular formations;
d) stroma of the tumor may be developed to varying degrees;
e) basal membrane, polarity, and complexity of the epithelium are preserved.

31. Histological variants of adenoma:
Variants of answer:
a) acinous;
b) tubular;
c) cystic;
d) all answers are correct;
e) all answers are incorrect.

32. In the malignancy of papilloma, the development of:
Variants of answer:
a) adenocarcinoma;
b) transitional cell carcinoma;
c) fibrosarcoma;
d) sarcoma;
e) melanoma.

33. In the malignancy of adenoma, the development of:
Variants of answer:
a) adenocarcinoma;
b) transitional cell carcinoma;
c) squamous cell carcinoma;
d) adenomatous polyp;
e) sarcoma.

34. Define the term "cancer":
Variants of answer:
a) malignant tumor;
b) malignant tumor of mesenchymal origin tissues;
c) malignant tumor of epithelial origin;
d) sarcoma variant;
e) benign tumor of epithelial origin.

35. Name precancerous processes:

Variants of answer:

a) adenomatous polyps;
b) epithelial dysplasia;
c) epithelial metaplasia;
d) adenomas;
e) all answers are correct.

36. Forms of intraepithelial cancer where stroma is absent and basal membrane is preserved:

Variants of answer:

a) medullary cancer;
b) scirrhus;
c) in situ carcinoma;
d) squamous cell carcinoma;
e) adenocarcinoma.

37. Histological variants of in situ carcinoma depending on histogenesis:

Variants of answer:

a) adenocarcinoma;
b) squamous cell carcinoma;
c) transitional cell carcinoma;
d) all answers are correct;
e) all answers are incorrect.

38. Consequences of in situ carcinoma:

Variants of answer:

a) regression;
b) progression to invasive cancer;
c) progression to papilloma;
d) progression to adenoma;
e) recurrence.

39. Malignant tumor of squamous epithelium:

Variants of answer:

a) papilloma;
b) squamous cell carcinoma;
c) adenoma;
d) adenocarcinoma;
e) condyloma.

40. Manifestations of morphological atypism in squamous cell carcinoma:

Variants of answer:

a) cellular;

b) intracellular;
c) no disruption of cell polarity and basal membrane observed;
d) antigenic atypism;
e) biochemical atypism.

41. Characteristics of the growth pattern of poorly differentiated squamous cell carcinoma in hollow organs:

Variants of answer:
a) exophytic;
b) endophytic;
c) expansive;
d) all answers are correct;
e) all answers are incorrect.

42. Possible locations of squamous cell carcinoma:

Variants of answer:
a) lungs;
b) heart;
c) larynx;
d) cervix;
e) correct answers a, c, d.

43. Preferential metastatic route of squamous cell carcinoma:

Variants of answer:
a) lymphatic;
b) hematogenous;
c) implantation;
d) perineural;
e) mixed.

44. Malignant tumor of glandular epithelium:

Variants of answer:
a) adenoma;
b) papilloma;
c) adenocarcinoma;
d) squamous cell carcinoma;
e) transitional cell carcinoma.

45. Variants of adenocarcinoma depending on histological structure:

Variants of answer:
a) acinous;
b) tubular;
c) trabecular;

d) papillary;
e) correct answers are all.

46. Variants of adenocarcinoma depending on the level of differentiation:
Variants of answer:
a) low-grade and high-grade;
b) acinar and tubular;
c) tubular;
d) trabecular;
e) papillary.

47. Characteristics of the growth pattern of well-differentiated adenocarcinoma in a hollow organ:
Variants of answer:
a) exophytic;
b) endophytic;
c) invasive;
d) all answers are correct;
e) all answers are incorrect.

48. Possible locations of adenocarcinoma:
Variants of answer:
a) stomach;
b) lungs;
c) breast;
d) intestine;
e) correct answers are all.

49. Preferential metastatic route of adenocarcinoma:
Variants of answer:
a) lymphatic;
b) hematogenous;
c) implantation;
d) perineural;
e) mixed.

50. Methods of investigation that most accurately determine the organ specificity of a tumor:
Variants of answer:
a) immunohistochemical;
b) microscopic;
c) histochemical;
d) ultrastructural;
e) all answers are correct.

51. Name malignant epithelial tumors of the liver:

Variants of answer:

a) adenocarcinoma;
b) hepatocellular carcinoma;
c) squamous cell carcinoma;
d) hepatosarcoma;
e) MALT.

52. Name a non-organ-specific malignant tumor of the liver:

Variants of answer:

a) adenocarcinoma;
b) hepatocellular carcinoma;
c) squamous cell carcinoma;
d) hepatosarcoma;
e) cholangiocellular carcinoma.

53. Name a feature confirming the organ specificity of hepatocellular carcinoma:

Variants of answer:

a) lipid vacuoles in cancer cells;
b) glycogen in cancer cells;
c) droplets of bile in cancer cells;
d) tubular structures in the cytoplasm of cancer cells;
e) intracellular canaliculi.

54. Name a malignant epithelial tumor that develops in the kidneys:

Variants of answer:

a) angiosarcoma;
b) liposarcoma;
c) lipoma;
d) nephroblastoma;
e) mucinous carcinoma.

55. Name the features of clear cell renal cell carcinoma cells:

Variants of answer:

a) granules of glycogen in the cytoplasm;
b) lipid droplets in the cytoplasm;
c) a large number of mitochondria;
d) developed endoplasmic reticulum;
e) neuroendocrine granules in the cytoplasm.

56. Name characteristic secondary changes for clear cell renal cell carcinoma:

Variants of answer:

a) papillomatosis;

b) hemorrhages;
c) foci of necrosis;
d) liquefaction;
e) correct answers b, c.

57. Name the characteristic route of metastasis for clear cell renal cell carcinoma:

Variants of answer:
a) hematogenous;
b) endocytobiosis;
c) perineural;
d) lymphatic;
e) implantation.

58. Indicate the period for which the development of nephroblastoma is characteristic:

Variants of answer:
a) at any age;
b) in childhood;
c) during embryogenesis;
d) in adulthood;
e) in old age.

10. TUMORS. PART 2

Choose one correct variant of answer

1. Tumor growth etiology theories include all of the following except:

Variants of answer:
a) viral-genetic;
b) polyetiological;
c) dysregulatory hormonal;
d) theory of cellular local synthesis;
e) physicochemical.

2. Mechanisms of activation of cellular oncogenes:

Variants of answer:
a) amplification;
b) point mutation + alteration;
c) proliferation + point mutation;
d) alteration + amplification;
e) amplification + point mutation.

3. Name the stages of chemical carcinogenesis:
Variants of answer:
a) alteration;
b) initiation + proliferation;
c) promotion;
d) proliferation;
e) initiation + promotion.

4. Oncoproteins include all of the following except:
Variants of answer:
a) homologs of growth factors;
b) homologs of growth factor receptors;
c) tyrosine kinase;
d) nuclear;
e) ATP-ase.

5. Name a precancerous process:
Variants of answer:
a) atrophy;
b) hypertrophy;
c) aplasia;
d) regeneration;
e) dystrophy.

6. Name the main principle of morphological classification of tumors:
Variants of answer:
a) histogenetic;
b) immunological;
c) polyetiological;
d) ultrastructural;
e) physicochemical.

7. The histogenetic principle of tumor classification is based on:
Variants of answer:
a) macroscopic structure of the organ;
b) biochemical characteristics of tissues;
c) anatomical structure of the organ;
d) histological structure of the original tissue;
e) ultrastructural features of the tissue.

8. Define the term "tumor atypism":
Variants of answer:
a) metabolic disorders;
b) changes in antigenic composition;

c) specific properties that distinguish the tumor from normal cells and tissues;
d) growth disturbance;
e) alteration in growth.

9. Name types of atypism in tumors:
Variants of answer:
a) morphological;
b) histochemical, biochemical;
c) antigenic;
d) all options are incorrect;
e) all options are correct.

10. Define the term "tumor":
Variants of answer:
a) transition of one tissue type to another;
b) uncontrolled proliferation of cells losing the ability to differentiate;
c) proliferation of cells accompanied by increased organ function;
d) proliferation of cells accompanied by suppression of organ function;
e) cell proliferation.

11. Name tumor antigens:
Variants of answer:
a) Australia antigen;
b) transplantation-type isoenzymes;
c) embryonic antigens, Australia antigen;
d) RNA virus;
e) transplantation-type isoenzymes, embryonic antigens.

12. Name the types of tumors that differ in the degree of differentiation:
Variants of answer:
a) large;
b) small;
c) slow-growing, fast-growing;
d) benign, malignant;
e) expansive, endophytic.

13. The character of tumor growth in relation to surrounding tissues includes all of the following except:
Variants of answer:
a) invasive;
b) expansive;
c) endophytic;
d) infiltrating;
e) appositional.

14. Name the character of growth of benign tumors in relation to surrounding tissues:

Variants of answer:

a) exophytic;
b) expansive;
c) endophytic;
d) infiltrating;
e) invasive.

15. Name the character of growth of malignant tumors in relation to surrounding tissues:

Variants of answer:

a) exophytic;
b) expansive;
c) endophytic;
d) infiltrating;
e) multicentric.

16. The growth of a tumor within the wall of a hollow muscular organ is called:

Variants of answer:

a) exophytic;
b) expansive;
c) endophytic;
d) infiltrating;
e) invasive.

17. The growth of a tumor into the lumen of a hollow muscular organ is called:

Variants of answer:

a) exophytic;
b) expansive;
c) endophytic;
d) infiltrating;
e) invasive.

18. Give the name of the type of growth of a tumor as a single node:

Variants of answer:

a) expansive;
b) unicentric;
c) multicentric;
d) exophytic;
e) endophytic.

19. Give the name of the type of growth of a tumor as multiple nodes:
Variants of answer:
a) expansive;
b) multicentric;
c) unicentric;
d) multiple;
e) appositional.

20. Name types of morphological atypism in tumors:
Variants of answer:
a) antigenic;
b) ultrastructural;
c) cellular, tissue;
d) histochemical;
e) correct answer is absent.

21. To secondary changes in tumors belong all of the following except:
Variants of answer:
a) atrophy, dystrophy;
b) necrosis, ulceration;
c) liquefaction;
d) hemorrhage;
e) petrification.

22. Name manifestations of cellular atypism:
Variants of answer:
a) cellular and nuclear polymorphism, atypical mitoses;
b) cellular and nuclear monomorphism;
c) normal mitoses;
d) small nuclei of the same shape;
e) change of the type of epithelium.

23. To the signs of cellular atypism belong all of the following except:
Variants of answer:
a) characteristic for tumors with moderate differentiation;
b) characteristic for malignant tumors;
c) expressed cellular polymorphism;
d) nuclear-cytoplasmic index shifted toward the nucleus;
e) cells and nuclei of the same shape and size.

24. Name features of tissue atypism:
Variants of answer:
a) characteristic only for benign tumors;
b) characteristic only for malignant tumors;

c) characteristic for tumors with locally destructive growth;
d) expressed in a violation of the ratio of parenchyma and stroma;
e) the ratio of parenchyma and stroma does not change.

25. Give a characteristic of benign tumors:
Variants of answer:
a) expansive growth, characterized by tissue atypism;
b) infiltrating growth;
c) exophytic and endophytic growth;
d) give metastases and recurrences;
e) correct answer is absent.

26. To the main characteristics of malignant tumors belong all of the following except:
Variants of answer:
a) expansive growth;
b) infiltrating growth;
c) exophytic and endophytic growth;
d) give metastases and recurrences;
e) characterized by tissue and cellular atypism.

27. Name the ways of metastasis of malignant tumors:
Variants of answer:
a) lymphogenous;
b) hematogenous;
c) implantation;
d) perineural;
e) all answers are correct.

28. Name the main factor determining the appearance of metastases:
Variants of answer:
a) nervous system;
b) increasing anaplasia of the tumor;
c) tumor penetration into the vessel wall;
d) metastasis gene;
e) APUD system.

29. Specify the essence of metastasis:
Variants of answer:
a) destruction of tumor cells;
b) embolism by tumor cells;
c) ischemia;
d) hyperemia;
e) necrosis of the primary tumor node.

30. The essence of the Willis tumor field theory:

Variants of answer:

a) presence of metastases in the tumor field;

b) recurrence of the tumor;

c) appearance of primary-multiple foci of proliferates, with further tumor transformation of proliferates, and their merging into one node;

d) appearance of a large node from the very beginning, occupying the entire field;

e) correct answer is absent.

31. The essence of tumor progression according to Foulds:

Variants of answer:

a) complex manifestation of signs of malignancy;

b) rapid development of secondary changes in tumors;

c) extensive metastasis;

d) appearance of tumor properties in cells through selection and mutation of clones;

e) appearance of recurrences.

32. Name the cells responsible for specific anti-tumor defense:

Variants of answer:

a) macrophages;

b) T-lymphocytes;

c) NK cells;

d) correct answer is absent;

e) all answers are correct.

33. Give the name of a tumor arising from derivatives of two or three germ layers:

Variants of answer:

a) lipoma;

b) sarcoma;

c) angiofibroma;

d) teratoma;

e) leiomyosarcoma.

34. Name the main structural components of a tumor determined by histological examination:

Variants of answer:

a) center;

b) periphery;

c) invasion zone;

d) parenchyma, stroma;

e) vessels.

35. Name the features of the structure of organoid tumors:
Variants of answer:
a) well-developed parenchyma and stroma;
b) poorly developed stroma;
c) poorly developed parenchyma;
d) encountered only in stromal tumors;
e) encountered only in parenchymal tumors.

36. Name the features of the structure of histoid tumors:
Variants of answer:
a) well-developed parenchyma;
b) poorly developed stroma;
c) early necrosis and ulceration;
d) rapid growth;
e) all answers are correct.

37. Give the name of tumors arising from embryonic displacements:
Variants of answer:
a) organoid;
b) histoid;
c) homologous;
d) heterologous;
e) heterotopic.

38. Give a morphological characteristic of fibroma:
Variants of answer:
a) benign tumor of connective tissue;
b) malignant tumor of connective tissue;
c) grows only on the skin;
d) organ-specific tumor;
e) benign tumor of epithelium.

39. Give a characteristic of desmoid:
Variants of answer:
a) a variety of glioma;
b) a variety of lipoma;
c) localized in the aponeurosis of the anterior abdominal muscles, recurs;
d) localized on the head, does not recur;
e) occurs mainly in boys.

40. Give a characteristic of benign tumors of fibrous tissue:
Variants of answer:
a) to identify histogenesis, staining with picropus is used;
b) types – fibroma, histiocytoma;

c) expansive growth, tissue atypism;
d) infiltrative growth, to identify histogenesis, the PAS reaction is used;
e) correct answers are a, b, c.

41. Give a characteristic of benign tumors of fatty tissue:
Variants of answer:
a) to identify histogenesis, staining with sudan III, IV is used;
b) types – lipoma, hibernoma;
c) expansive growth, tissue atypism;
d) infiltrative growth, to identify histogenesis, the PAS reaction is used;
e) correct answers are a, b, c.

42. For lipoma, all of the following are characteristic except:
Variants of answer:
a) benign tumor of fatty tissue;
b) benign tumor of brown fat;
c) expansive growth, tissue atypism;
d) use sudan III staining for identification;
e) use sudan IV staining for identification.

43. Name a benign tumor of fatty tissue:
Variants of answer:
a) histoma;
b) fibroma;
c) hibernoma;
d) histiocytoma;
e) desmoid.

44. Name benign tumors of muscular tissue:
Variants of answer:
a) granular cell tumor;
b) rhabdomyoma;
c) leiomyoma;
d) all answers are correct;
e) all answers are incorrect.

45. Give a characteristic of leiomyoma:
Variants of answer:
a) tumor from myoblasts;
b) smooth muscle tumor;
c) grows invasively, tissue atypism;
d) occurs only in women in the uterus;
e) organ-specific tumor.

46. Characteristics of fibromyoma include all of the following except:
Variants of answer:
a) benign tumor of fibrous and muscular tissue;
b) benign tumor only of muscular tissue;
c) a variety of leiomyoma with well-developed stroma;
d) especially common in the uterus;
e) often undergoes secondary changes (liquefaction, petrification).

47. Give a characteristic of rhabdomyoma:
Variants of answer:
a) malignant tumor of striated muscle;
b) benign tumor of striated muscle;
c) grows invasively, cellular and tissue atypism;
d) grows invasively, only tissue atypism;
e) occurs only in the tongue.

48. Tumors of vascular origin include all of the following except:
Variants of answer:
a) angiosarcoma;
b) lymphangioma;
c) granular cell tumor;
d) glomus angioma;
e) hemangioma.

49. Give a characteristic of cavernous hemangioma:
Variants of answer:
a) benign tumor of vascular origin;
b) develops from cavernous tissue;
c) grows expansively, tissue atypism;
d) all answers are correct;
e) all answers are incorrect.

50. Give the name of a benign tumor of cartilaginous tissue:
Variants of answer:
a) chordoma;
b) chondroma;
c) choristoma;
d) chondrosarcoma;
e) osteoma.

51. Give the name of a benign tumor of bone tissue:
Variants of answer:
a) Abricosov tumor;
b) Berkitt tumor;

c) osteosarcoma;
d) osteoma;
e) Bracket tumor.

52. Give a characteristic of osteoma:
Variants of answer:
a) tumor from cartilaginous tissue;
b) low degree of differentiation;
c) benign tumor of bone tissue;
d) metastasizes primarily hematogenously;
e) grows invasively, tissue atypism.

53. Characterize fibrosarcoma:
Variants of answer:
a) divided into soft and dense;
b) divided into differentiated and undifferentiated, invasive growth pattern;
c) metastasizes by all possible pathways;
d) implantation and lymphogenic metastasis;
e) correct answer is absent.

54. Localization of the first metastases of fibrosarcoma of soft tissues of the thigh:
Variants of answer:
a) liver;
b) kidney;
c) spleen;
d) lungs;
e) inguinal lymph nodes.

55. Localization of the first metastases of fibrosarcoma of the small intestine:
Variants of answer:
a) liver;
b) kidney;
c) spleen;
d) lungs;
e) lymph nodes of the mesentery of the intestine.

56. The following belong to tumors of muscle tissue, except:
Variants of answer:
a) rhabdomyoma, leiomyoma;
b) malignant hemangioma;
c) leiomyosarcoma;
d) malignant granular cell tumor;
e) rhabdomyosarcoma.

57. All of the following are characteristics of leiomyosarcoma, except:
Variants of answer:
a) malignant tumor of smooth muscle tissue;
b) low degree of differentiation;
c) cellular and tissue atypism;
d) metastasizes primarily perineurally;
e) recurs.

58. Characterize rhabdomyosarcoma:
Variants of answer:
a) malignant tumor of striated muscle tissue;
b) high degree of differentiation;
c) tissue atypism;
d) metastasizes primarily lymphogenically;
e) first metastases to regional lymph nodes.

59. The following are features of angiosarcoma, except:
Variants of answer:
a) distinguish malignant hemangiopericytoma and hemangioendothelioma;
b) first metastases to regional lymph nodes;
c) metastasizes hematogenously;
d) invasive growth;
e) rapid recurrence.

60. Characteristics of malignant tumors of adipose tissue include all of the following, except:
Variants of answer:
a) divided into malignant hemangioma and liposarcoma;
b) low degree of differentiation;
c) cellular and tissue atypism;
d) correct answers;
e) incorrect answers.

61. The characteristics of liposarcoma include all of the following, except:
Variants of answer:
a) malignant tumor of brown fat;
b) low degree of differentiation;
c) metastasizes hematogenously;
d) invasive growth, recurrence;
e) invasive growth, metastasis.

62. Characterize malignant tumor of brown fat:
Variants of answer:
a) called malignant hemangioma;

b) low degree of differentiation;
c) invasive growth, metastasis, and recurrence;
d) correct answers;
e) incorrect answers.

63. Name the precancerous process that can lead to melanoma:
Variants of answer:
a) vitiligo;
b) nevus;
c) hyperkeratosis;
d) acanthosis;
e) dermatitis.

64. Name the types of nevi:
Variants of answer:
a) epithelioid;
b) compound;
c) borderline;
d) blue;
e) all correct answers.

65. The locations of melanoma include all of the following, except:
Variants of answer:
a) skin;
b) meninges of the brain;
c) adrenal glands;
d) pigmented layer of the eye;
e) no correct answer.

66. All statements related to melanoma are true, except:
Variants of answer:
a) malignant tumor of melanin-producing tissue;
b) metastasizes only hematogenously;
c) metastasizes hematogenously and lymphogenously;
d) infiltrative growth;
e) recurs.

67. According to the classification, tumors of the central nervous system include:
Variants of answer:
a) brain tumors;
b) spinal cord tumors;
c) tumors of the autonomic nervous system;

d) neuroectodermal and meningeal-vascular tumors;
e) correct answer is absent.

68. To neuroectodermal tumors belong all of the following, except:
Variants of answer:
a) neuronal;
b) meningeal sarcomas;
c) astrocytic;
d) oligodendroglial;
e) ependymal.

69. Characterize astrocytomas:
Variants of answer:
a) benign tumor of meningeal-vascular origin;
b) benign neuroectodermal tumor;
c) malignant neuroectodermal tumor;
d) invasive growth, recurrence;
e) invasive growth, tissue and cellular atypism.

70. Name ependymal tumors:
Variants of answer:
a) medulloblastoma;
b) ependymoma, ependymoblastoma;
c) glioblastoma, ganglioneuroma;
d) choroid papilloma, choroid carcinoma;
e) arachnoid endothelioma.

71. Name the disease that belongs to systemic neoplastic diseases of hematopoietic tissue:
Variants of answer:
a) leukemia;
b) sarcoma;
c) cancer;
d) anemia;
e) lymphoma.

72. Lymphosarcoma belongs to:
Variants of answer:
a) precancerous disease;
b) immune inflammation;
c) regional neoplastic disease of hematopoietic tissue;
d) systemic neoplastic disease of hematopoietic tissue;
e) malignant tumor of mesenchymal origin.

73. Define the term "leukemia":

Variants of answer:

a) regional neoplastic disease of hematopoietic tissue;
b) malignant tumor of epithelial origin;
c) systemic neoplastic disease of hematopoietic tissue;
d) malignant tumor of mesenchymal origin;
e) precancerous blood disease.

74. Hemoblastoses can include:

Variants of answer:

a) dysplasia of bone tissue;
b) retroperitoneal sarcoma;
c) Hodgkin's lymphoma;
d) acute leukemia;
e) Kaposi's sarcoma.

75. Cellular elements that make up malignant lymphomas:

Variants of answer:

a) only stromal elements;
b) epithelial cell elements;
c) only lymphoid cells;
d) undifferentiated blood cells;
e) hematopoietic cell elements and stromal cells.

76. Synonym for the term "leukemia":

Variants of answer:

a) malignant lymphoma;
b) leukemia;
c) dysplasia;
d) sarcoma;
e) anemia.

77. List the organs where tumor cells proliferate in the initial stage of hemoblastosis:

Variants of answer:

a) in hematopoietic organs;
b) in the cardiovascular system;
c) in the musculoskeletal system;
d) in the respiratory system;
e) in the gastrointestinal tract.

78. Name the reasons for the rapid enlargement of organs in leukemia:

Variants of answer:

a) formation of granulomas;

b) edema;
c) congestion;
d) sclerosis;
e) metastasis of tumor cells.

79. Name the factors for the development of chronic myeloid leukemia:
Variants of answer:
a) absence of autosomal pair 13 chromosomes;
b) intoxication with benzo(a)pyrene;
c) presence of the Philadelphia chromosome;
d) ionizing radiation;
e) intoxication with benzo(a)pyrene, presence of the Philadelphia chromosome.

80. Leukemic leukemia is indicated by the following changes:
Variants of answer:
a) 100,000 leukocytes in 1 μl of blood;
b) 25,000 leukocytes in 1 μl of blood;
c) absence of leukemic cells in the blood;
d) occasional leukemic cells in the blood;
e) "wolf-like" cells in the blood.

81. Subleukemic leukemia is indicated by the following changes:
Variants of answer:
a) 100,000 leukocytes in 1 μl of blood;
b) 25,000 leukocytes in 1 μl of blood;
c) absence of leukemic cells in the blood;
d) occasional leukemic cells in the blood;
e) rheumatoid factor in the blood.

82. Leukopenic leukemia is indicated by the following changes:
Variants of answer:
a) 100,000 leukocytes in 1 μl of blood;
b) 25,000 leukocytes in 1 μl of blood;
c) absence of leukemic cells in the blood;
d) occasional leukemic cells in the blood;
e) "wolf-like" cells in the blood.

83. Aleukemic leukemia is indicated by the following changes:
Variants of answer:
a) 100,000 leukocytes in 1 μl of blood;
b) 25,000 leukocytes in 1 μl of blood;
c) absence of leukemic cells in the blood;
d) occasional leukemic cells in the blood;
e) rheumatoid factor in the blood.

84. Name the principles of modern classification of leukemias:

Variants of answer:

a) change in the number of leukocytes in the blood;

b) degree of differentiation of tumor cells and the nature of the course;

c) histogenesis of leukemic cells;

d) features of clinical treatment;

e) change in the number of leukocytes in the blood + degree of differentiation of tumor cells and the nature of the course + histogenesis of leukemic cells.

85. Name the principles of dividing leukemias into acute and chronic:

Variants of answer:

a) duration of the course;

b) degree of differentiation of tumor cells and the nature of the course;

c) histogenesis of leukemic cells;

d) number of leukocytes in peripheral blood;

e) localization of leukemic infiltrates.

86. Proliferation of undifferentiated or poorly differentiated blast cells of the blood is characteristic of:

Variants of answer:

a) Hodgkin's lymphoma;

b) Pompe's disease;

c) acute leukemia;

d) anemia;

e) lymphosarcoma.

87. Proliferation of differentiated leukemic blood cells is characteristic of:

Variants of answer:

a) Hodgkin's lymphoma;

b) Kaposi's sarcoma;

c) acute leukemia;

d) chronic leukemia;

e) Burkitt's tumor.

88. Name the cytogenetic forms of chronic leukemia:

Variants of answer:

a) lymphocytic, monocytic;

b) erythremia;

c) leukemic, myelocytic;

d) myelocytic;

e) leukopenic.

89. Name the forms of acute leukemia:
Variants of answer:
a) megakaryoblastic;
b) lymphoblastic, myeloblastic;
c) myeloma;
d) megakaryoblastic, myeloblastic;
e) megakaryoblastic, lymphoblastic, myeloblastic.

90. List chronic leukemias:
Variants of answer:
a) myeloma;
b) lymphoblastic leukemia;
c) Franklin's heavy chain disease;
d) myeloma, Franklin's heavy chain disease;
e) correct answer is absent.

91. Indicate the type of chronic leukemia:
Variants of answer:
a) Hodgkin's lymphoma;
b) Sezary's disease;
c) lymphoblastic;
d) lymphosarcoma;
e) myeloblastic.

92. Name the leukemia of monocytic origin:
Variants of answer:
a) Hodgkin's lymphoma;
b) lymphosarcoma;
c) histiocytosis;
d) myeloid leukemia;
e) erythromyelosis.

93. Name chronic lympholeukemias:
Variants of answer:
a) Waldenstrom's macroglobulinemia;
b) myeloma;
c) lymphoblastic leukemia;
d) cutaneous lymphomatosis;
e) myeloma, Franklin's heavy chain disease.

94. Histogenetic form of chronic leukemia:
Variants of answer:
a) leukemic;
b) erythremia;

c) myeloblastic;
d) leukocytic;
e) leukopenic.

95. Name the reason for the development of anemia in leukemia:
Variants of answer:
a) "porphyric" spleen;
b) diffuse hyperplasia of lymphoid tissue;
c) displacement of red bone marrow;
d) diffuse hypoplasia of lymphoid tissue;
e) leukemic infiltration of blood vessel walls.

96. Among the main causes of death in patients with chronic leukemia are not:
Variants of answer:
a) secondary infections, sepsis;
b) intracranial hemorrhage;
c) hepatic and renal failure;
d) blast crisis;
e) chronic heart failure.

97. A sudden increase in the number of blasts and individual mature elements in the absence of transitional maturing forms qualifies as:
Variants of answer:
a) blast crisis;
b) anemia;
c) leukemic relapse;
d) aplasia of the bone marrow;
e) fatty degeneration of the bone marrow.

98. Name the general pathological process that underlies the appearance of leukemic infiltrates in organs:
Variants of answer:
a) chronic venous congestion;
b) sclerosis;
c) metastasis;
d) displacement of the red marrow from the bone marrow;
e) portal hypertension.

99. List the complications that occur in leukemias due to immune system disturbances:
Variants of answer:
a) intracranial hemorrhage;
b) sepsis, secondary infection, ulcerative-necrotic changes in the gastrointestinal tract;

c) acute adrenal insufficiency;
d) acute heart failure;
e) acute respiratory failure.

100. In the organs of hematopoiesis during acute leukemia, there are:
Variants of answer:
a) leukemic infiltrates from mature (cytic) elements;
b) sclerosis of the bone marrow;
c) hypoplasia of the bone marrow;
d) leukemic infiltrates from blast cells;
e) metaplasia of the bone marrow into bone tissue.

101. Name the form of acute leukemia in children:
Variants of answer:
a) chloroleukemia;
b) Hodgkin's lymphoma;
c) Paget's disease;
d) histiocytosis;
e) Cesari's disease.

102. Indicate the form of acute leukemia that occurs only in children:
Variants of answer:
a) congenital leukemia;
b) lymphocytic leukemia;
c) Paget's disease;
d) histiocytosis;
e) Cesari's disease.

103. Macroscopic characteristics of the appearance of the bone marrow of tubular bones in patients with acute undifferentiated leukemia:
Variants of answer:
a) red juicy;
b) pioid;
c) yellow;
d) obliteration of the bone marrow cavity;
e) rusty.

104. Name characteristic complications of acute leukemia:
Variants of answer:
a) acute heart failure;
b) acute renal failure;
c) leukemic pneumonitis, leukemic meningitis;
d) myocardial infarction;
e) acute respiratory failure.

105. Name the stages of the course of chronic myeloid leukemia:

Variants of answer:

a) monoclonal stage, polyclonal stage;
b) stage of red dystrophy;
c) stage of yellow dystrophy;
d) stage of advanced changes;
e) prodromal stage.

106. Name a sign of exacerbation of chronic leukemia:

Variants of answer:

a) pulmonary thromboembolism;
b) blast crisis;
c) acute heart failure;
d) acute renal failure;
e) ascites.

107. Specify the cells that appear in the blood in the terminal stage of chronic myeloid leukemia:

Variants of answer:

a) myelocytes;
b) reticular cells;
c) blast cells;
d) Berezovsky-Sternberg cells;
e) myeloma cells.

108. Macroscopic appearance of the bone marrow in a patient with chronic myeloid leukemia:

a) yellow;
b) red with foci of yellow color;
c) pioid;
d) with a rusty tint;
e) yellow with foci of red color.

109. Name the forms of lympholeukosis with predominant skin lesions:

Variants of answer:

a) Waldenstrom's disease;
b) heavy chain disease;
c) Cesari's disease;
d) myeloma;
e) Hirchke's disease.

110. Name the characteristic manifestations of multiple myeloma:

Variants of answer:

a) pulmonary and cardiac failure;

b) osteoporosis, paraproteinemia;
c) Wilson-Jones protein in the urine;
d) obesity;
e) increase in the number of leukocytes in the blood.

111. Myeloma cells produce:
Variants of answer:
a) α-globulin;
b) albumin;
c) parathormone;
d) paraprotein;
e) serotonin.

112. The presence of Bence-Jones protein in the urine is characteristic of:
Variants of answer:
a) myeloblastic leukemia;
b) myelocytic leukemia;
c) multiple myeloma;
d) lymphocytic leukemia;
e) megakaryoblastic leukemia.

113. Name the leukemia, the frequent complication of which is amyloidosis:
Variants of answer:
a) lymphoblastic leukemia;
b) multiple myeloma;
c) myelocytic leukemia;
d) lymphosarcoma;
e) myeloblastic leukemia.

114. Multiple myeloma, by quantitative changes in the blood, belongs to:
Variants of answer:
a) leukemic leukemia;
b) subleukemic leukemia;
c) leukopenic leukemia;
d) aleukemic leukemia;
e) blast crisis.

115. Specify the mineral metabolism disorder often seen in multiple myeloma, caused by osteoporosis:
Variants of answer:
a) hypernatremia;
b) hyperphosphatemia;
c) hyperkalemia;
d) hypercalcemia;
e) hypokalemia.

116. Specify the causes of death in patients with multiple myeloma:
Variants of answer:
a) focal pneumonia, renal failure;
b) ischemic stroke;
c) myocardial infarction;
d) cardiovascular failure;
e) hepatic failure.

117. The figurative name of the spleen in Hodgkin's lymphoma:
Variants of answer:
a) marble;
b) porphyric;
c) fatty;
d) mottled;
e) hyperplastic.

118. Name cells that have diagnostic value in Hodgkin's lymphoma:
Variants of answer:
a) small and large Hodgkin cells, Berezovsky-Sternberg giant cells;
b) erythrocytes;
c) myeloid cells;
d) eosinophils;
e) plasmablasts.

119. Specify the organ where leukemic metastases most commonly persist during treatment with cytostatic drugs:
Variants of answer:
a) brain;
b) heart;
c) kidneys;
d) pancreas;
e) spleen.

120. Name the form of acute leukemia in children with a favorable outcome:
Variants of answer:
a) monocytic;
b) T-lymphoblastic;
c) B-lymphoblastic;
d) myeloblastic;
e) undifferentiated.

121. Name the most common cause of death in Hodgkin's lymphoma:
Variants of answer:
a) bleeding into various organs;

b) secondary infection;
c) bleeding;
d) osteoporosis;
e) necrotic nephrosis.

122. List complications characteristic of chronic lympholeukemia:
Variants of answer:
a) bleeding;
b) organ infarctions;
c) infectious diseases;
d) renal failure;
e) heart failure.

123. The Philadelphia chromosome is detected in:
Variants of answer:
a) acute myeloid leukemia;
b) chronic lympholeukemia;
c) chronic myeloleukemia;
d) acute undifferentiated leukemia;
e) promyelocytic leukemia.

124. Sezary's disease is:
Variants of answer:
a) regional lymphoma;
b) paraproteinemic leukemia;
c) thrombocytopathy;
d) anemia;
e) thrombocytopenia.

125. Blast crisis is:
Variants of answer:
a) appearance of individual blast cells in the blood;
b) appearance of blast cells in the bone marrow;
c) appearance of blast cells in the blood in the first stage of chronic leukemia;
d) multitude of blast cells in the blood in acute leukemia;
e) many blast cells in the blood in the second stage of chronic leukemia.

126. Pioide bone marrow is observed in:
Variants of answer:
a) chronic lympholeukemia;
b) Burkitt's lymphoma;
c) acute myeloleukemia;
d) Sezary's disease;
e) chronic myeloleukemia.

127. For the diagnosis of acute leukemias, the following are used:
Variants of answer:
a) blood smear;
b) bone marrow aspirate;
c) general condition of the patient;
d) biochemical blood analysis;
e) radiological method.

128. The etiology of leukemia is:
Variants of answer:
a) viral;
b) infectious;
c) chemical;
d) physical;
e) multifactorial.

129. Acute leukemia is characterized by the proliferation of:
Variants of answer:
a) undifferentiated and poorly differentiated bone marrow cells;
b) highly differentiated blood cells;
c) B cells;
d) mature plasma cells;
e) immature B cells and plasmablasts.

130. Specify the period during which acute leukemia can transition to chronic:
Variants of answer:
a) with a treatment duration of more than 1 month;
b) with a treatment duration of more than 3 months;
c) with a treatment duration of more than 1 year;
d) under the influence of treatment;
e) never.

131. Leukemic relapse occurs in:
Variants of answer:
a) acute myeloleukemia;
b) chronic myeloleukemia;
c) Sezary's disease;
d) Rustitsky-Kahler's disease;
e) Waldenstrom's disease.

132. Name the changes in the gastrointestinal tract in leukemia:
Variants of answer:
a) atrophy;
b) ulcerative-necrotic;

c) ischemic;
d) hypertrophic;
e) dystrophic.

133. Name a variant of Hodgkin's lymphoma with a relatively favorable course:

Variants of answer:
a) variant with suppression of lymphoid tissue;
b) nodular sclerosis;
c) mixed-cell variant;
d) Hodgkin's sarcoma;
e) variant with predominance of lymphoid tissue.

134. The "starry sky" pattern in microscopic examination of a lymph node is characteristic of:

Variants of answer:
a) Hodgkin's lymphoma;
b) multiple myeloma;
c) Sezary's disease;
d) African lymphoma;
e) lymphosarcoma.

11. TUMORS. PART 3

Choose one correct variant of answer

1. Identify the organ-specific cancer of the breast:

Variants of answer:
a) non-infiltrating intraductal;
b) intraductal;
c) nodular;
d) diffuse;
e) infiltrating.

2. Name the condition that can serve as a background for the development of non-infiltrating intraductal breast cancer:

Variants of answer:
a) dysgormonal dysplasia;
b) atrophy;
c) sclerosis;
d) hypertrophy;
e) fibroma.

3. Name the histological variants of non-invasive intraductal breast cancer:
Variants of answer:
a) squamous cell without keratosis;
b) solid;
c) small cell;
d) glandular;
e) solid, glandular.

4. Specify the histological variant of non-infiltrating intraductal breast cancer:
Variants of answer:
a) squamous cell;
b) polypoid;
c) nodular;
d) small cell;
e) spindle cell.

5. Specify a characteristic feature of the occurrence of breast cancer:
Variants of answer:
a) rarely occurs multicentrically;
b) occurs at a young age;
c) metastasizes rapidly;
d) often occurs multicentrically;
e) ulcerates early.

6. Name the microscopic feature of nodular breast cancer:
Variants of answer:
a) has an expansive growth;
b) metastasizes late;
c) no secondary changes;
d) has a polyp-like appearance;
e) calcified areas are detected.

7. Specify the characteristics of Paget's disease:
Variants of answer:
a) involvement of the nipple and areola;
b) hematogenous metastasis;
c) no involvement of the nipple and areola;
d) first metastases to the liver;
e) characterized by calcification.

8. Provide a macroscopic classification of breast cancer:
Variants of answer:
a) polypoid;
b) nodular;

c) diffuse;
d) intraductal;
e) polypoid, nodular.

9. Name the cancer that spreads on the surface of the breast:
Variants of answer:
a) pancancerous;
b) diffuse;
c) plate-like;
d) squamous cell;
e) superficial.

10. List the main histological types of breast cancer:
Variants of answer:
a) infiltrating;
b) non-infiltrating;
c) special types;
d) all answers are correct;
e) all answers are incorrect.

11. Specify the group of lymph nodes where metastases of breast cancer are not detected:
Variants of answer:
a) axillary;
b) anterior chest;
c) subclavian;
d) submandibular;
e) parasternal.

12. Specify the organs where hematogenous metastases of breast cancer are not detected:
Variants of answer:
a) in bones;
b) in the lungs;
c) in the brain;
d) in the liver;
e) in the kidneys.

13. Specify the periods during which recurrences are more likely to occur after the removal of breast cancer:
Variants of answer:
a) in the first months;
b) recurrences are not typical;

c) after 3–5 years and later;
d) after 25–30 years and later;
e) after 1 year.

14. List the diseases that may precede the development of stomach cancer:
Variants of answer:
a) chronic ulcer;
b) enteritis;
c) chronic ulcer, gastric polyp;
d) chronic ulcer, chronic gastritis;
e) chronic ulcer, gastric polyp, chronic gastritis.

15. Give the name of the changes in the gastric mucosa that immediately precede cancer:
Variants of answer:
a) hyperplasia;
b) dysplasia;
c) erosion;
d) acute ulcer;
e) atrophy.

16. The clinical-anatomical classification of stomach cancer is based on all of the following except:
Variants of answer:
a) survival rate;
b) location of the tumor;
c) character of tumor growth;
d) macroscopic form of the tumor;
e) histological type of the tumor.

17. Specify the section of the stomach where cancer is most often localized:
Variants of answer:
a) greater curvature;
b) fundal;
c) cardiac;
d) pyloric;
e) anterior wall.

18. Name the main clinical-anatomical form of stomach cancer based on the character of growth:
Variants of answer:
a) predominantly exophytic growth;
b) nodular;

c) diffuse;
d) plate-like;
e) ulcerated.

19. Name the main clinical-anatomical forms of stomach cancer:
Variants of answer:
a) massive;
b) predominantly exophytic growth;
c) peripheral;
d) mixed character of growth;
e) predominantly exophytic growth, mixed character of growth.

20. The following are not included in the forms of stomach cancer with predominantly exophytic growth:
Variants of answer:
a) plate-like;
b) polypoid;
c) fungoid;
d) ulcerated cancer;
e) diffuse.

21. Name the ulcerative form of stomach cancer with exophytic growth:
Variants of answer:
a) infiltrative-ulcerative;
b) predominantly ulcerative;
c) total;
d) round ulcer;
e) focal.

22. Name the ulcerative form of stomach cancer with endophytic growth:
Variants of answer:
a) diffuse with limited involvement;
b) plate-like;
c) saucer-shaped cancer;
d) infiltrative-ulcerative;
e) massive.

23. Specify the exophytic form of stomach cancer that is the least commonly recognized:
Variants of answer:
a) fungoid;
b) papillomatous;

c) saucer-shaped cancer;
d) predominantly ulcerative cancer;
e) ulcerated.

24. Name the form of stomach cancer that has the appearance of a nodular formation with a villous surface, located on a stalk:

Variants of answer:
a) saucer-shaped;
b) papillomatous;
c) polyposis;
d) fungoid;
e) nodular.

25. Name the form of stomach cancer that has the appearance of a nodular formation with a bumpy nodular surface on a broad stalk:

Variants of answer:
a) papillomatous;
b) polyposis;
c) fungoid;
d) fungous;
e) protruding.

26. Give a characteristic of primary-ulcerative stomach cancer:

Variants of answer:
a) endophytic cancer with ulceration;
b) fungous cancer with ulceration;
c) malignant ulcer;
d) predominantly exophytic growth with early ulceration;
e) characterized by infiltrative growth.

27. Name the macroscopic form of stomach cancer that grows endophytically in the mucous, submucous, and muscular layers:

Variants of answer:
a) mucous;
b) diffuse;
c) interstitial;
d) skirr;
e) early cancer.

28. Define the term "early stomach cancer":

Variants of answer:
a) a small tumor in size;
b) a tumor growing exophytically;

c) grows no deeper than the submucosal layer;
d) a tumor growing endophytically;
e) a tumor without ulcers.

29. Name the clinical feature of early stomach cancer:
Variants of answer:
a) high 5-year survival rate for patients;
b) tendency to recurrence;
c) hematogenous metastasis;
d) rapid progression;
e) multiple metastases.

30. Identify the main histological types of stomach cancer:
Variants of answer:
a) adenocarcinoma;
b) undifferentiated;
c) signet-ring cell;
d) all the answers are correct;
e) all the answers are incorrect.

31. Identify the common histological type of exophytic forms of stomach cancer:
Variants of answer:
a) squamous cell;
b) undifferentiated;
c) small cell;
d) adenocarcinoma;
e) signet-ring cell.

32. Identify the common histological type of endophytic forms of stomach cancer:
Variants of answer:
a) adenocarcinoma;
b) squamous cell;
c) spindle cell;
d) undifferentiated;
e) solid.

33. Specify the metastatic pathway that is primary in the spread of stomach cancer:
Variants of answer:
a) hematogenous;
b) implantation;

c) lymphogenous;
d) embolic;
e) thromboembolic.

34. The first metastases of stomach cancer are detected:
Variants of answer:
a) in the mediastinal lymph nodes;
b) in the lymph nodes of the lesser and greater curvature of the stomach;
c) in the lungs;
d) in the liver;
e) in the spleen.

35. The name of the metastasis of stomach cancer to the left supraclavicular lymph nodes:
Variants of answer:
a) Paget's disease;
b) Hodgkin's disease;
c) thymus;
d) Sjögren's syndrome;
e) Virchow's node.

36. The pathway of metastasis to the left supraclavicular lymph nodes in stomach cancer:
Variants of answer:
a) orthograde;
b) retrograde;
c) paradoxical;
d) implantation;
e) hematogenous.

37. Retrograde metastases in stomach cancer can be detected:
Variants of answer:
a) in the adrenal glands;
b) in the lesser sac;
c) Krukenberg metastasis;
d) paranephric tissue;
e) in the pancreas.

38. Name the organs where lymphogenous metastases of stomach cancer may appear:
Variants of answer:
a) lungs;
b) pleura;
c) omentum;

d) all the answers are correct;
e) all the answers are incorrect.

39. Name the pathological process that reflects the implantation pathway of stomach cancer metastasis:

Variants of answer:
a) Schnitzler's metastasis;
b) metastases to the soft meninges;
c) metastases to the liver;
d) Carcinomatosis peritonei;
e) Virchow's nodes.

40. Name frequent secondary changes in stomach cancer:

Variants of answer:
a) amyloidosis;
b) thrombosis;
c) necrosis, inflammation;
d) hyalinosis;
e) congestion.

41. Name complications that cannot occur due to necrosis of stomach cancer:

Variants of answer:
a) phlebitic abscesses, cholecystitis;
b) perforation of the stomach wall;
c) bleeding;
d) pre-tumor inflammation;
e) correct answer is absent.

42. Specify a condition that cannot accompany the invasion of stomach cancer into the diaphragm:

Variants of answer:
a) peritonitis;
b) seeding of the pleura;
c) fibrinohemorrhagic pleuritis;
d) empyema of the pleura;
e) hemothorax.

43. Specify a disturbance of lipid metabolism that may complicate stomach cancer:

Variants of answer:
a) amyloidosis;
b) cachexia;

c) hyalinosis;
d) coagulopathy;
e) obesity.

44. Specify factors that play a role in the genesis of cachexia in stomach cancer:

Variants of answer:
a) peptic disorders;
b) intoxication;
c) alimentary deficiency;
d) all the answers are correct;
e) all the answers are incorrect.

45. Name the malignant lung tumor that develops most often:

Variants of answer:
a) carcinoid;
b) cancer;
c) sarcoma;
d) lymphoma;
e) sarcoidosis.

46. Indicate a criterion that is not considered in the classification of lung cancer:

Variants of answer:
a) location;
b) growth pattern;
c) macroscopic form;
d) microscopic form;
e) survival.

47. Specify the localization of lung cancer that occurs most frequently:

Variants of answer:
a) central;
b) peripheral;
c) lobar;
d) acinous;
e) massive.

48. Name the factor that plays a primary role in the etiology of central lung cancer:

Variants of answer:
a) intoxication;
b) alcohol abuse;
c) smoking;

d) chronic tonsillitis;
e) tuberculosis.

49. Name the disease that is most often a background for central lung cancer:

Variants of answer:
a) tuberculosis;
b) chronic pneumonia;
c) pneumosclerosis;
d) chronic bronchitis;
e) sarcoidosis.

50. Name a possible growth pattern of central lung cancer:

Variants of answer:
a) expansive;
b) multicentric;
c) exophytic;
d) surface;
e) monocentric.

51. To possible macroscopic forms of central lung cancer include all of the following, except:

Variants of answer:
a) endobronchial diffuse;
b) exophytic;
c) nodular;
d) Branching;
e) nodular-branching;

52. Name the change that does not complicate central lung cancer:

Variants of answer:
a) segmental atelectasis;
b) pneumoconiosis;
c) pneumonia;
d) abscess;
e) bronchiectasis.

53. Name the organs and tissues to which a tumor of the main bronchus can spread with endophytic growth:

Variants of answer:
a) mediastinal tissues;
b) pericardium;
c) pleura;

d) all the answers are correct;
e) all the answers are incorrect.

54. Specify the nature of pleurisy when lung cancer spreads to the pleura:
Variants of answer:
a) purulent;
b) serous;
c) serous-hemorrhagic;
d) gangrenous;
e) fibrinous.

55. All of the following are main histological types of central lung cancer, except:
Variants of answer:
a) squamous cell with keratinization;
b) squamous cell without keratinization;
c) adenocarcinoma;
d) undifferentiated;
e) oat cell.

56. Degree of differentiation of squamous cell lung cancer:
Variants of answer:
a) highly differentiated;
b) moderately differentiated;
c) poorly differentiated;
d) all the answers are correct;
e) all the answers are incorrect.

57. Characteristics of well-differentiated squamous cell lung cancer include all of the following, except:
Variants of answer:
a) moderate polymorphism of cells and nuclei;
b) absence of keratinization;
c) formation of "cancer pearls";
d) presence of intercellular bridges;
e) cells arranged in nests.

58. Characteristics of poorly differentiated squamous cell lung cancer include all of the following, except:
Variants of answer:
a) marked polymorphism of cells and nuclei;
b) formation of "cancer pearls";
c) absence of keratinization;

d) presence of spindle-shaped cells;
e) a large number of pathological mitoses.

59. Specify which sections of the lung can be a source of peripheral lung cancer:

Variants of answer:
a) lobar bronchi;
b) peripheral segments of the segmental bronchus;
c) proximal segments of the segmental bronchus;
d) bifurcation lymph nodes;
e) trachea.

60. Name the features of the growth of peripheral lung cancer:

Variants of answer:
a) rapid ulceration;
b) exophytic growth;
c) prolonged expansive growth;
d) areas of necrosis;
e) diffuse growth.

61. Specify the most common histological type of massive lung cancer:

Variants of answer:
a) fibroplastic;
b) noma;
c) sclerosis;
d) adenocarcinoma;
e) diffuse.

62. Name common metastatic pathways of peripheral lung cancer:

Variants of answer:
a) hematogenous;
b) lymphogenous;
c) implantation;
d) all the answers are correct;
e) all the answers are incorrect.

63. Name an organ where hematogenous metastases of peripheral lung cancer are not characteristic:

Variants of answer:
a) liver;
b) brain;
c) pancreas;
d) adrenal glands;
e) bones.

SYSTEMIC PATHOLOGICAL ANATOMY

12. ATHEROSCLEROSIS. ARTERIAL HYPERTENSION. CORONARY ARTERY DISEASE

Choose one correct variant of answer

1. Specify the types of vessels that are affected in atherosclerosis:
Variants of answer:
a) veins;
b) small arteries;
c) arterioles;
d) venules;
e) arteries of the muscular-elastic type.

2. Specify the relationship between atherosclerosis and arteriosclerosis:
Variants of answer:
a) atherosclerosis – a type of arteriosclerosis;
b) arteriosclerosis – a type of atherosclerosis;
c) atherosclerosis – immune arteriosclerosis;
d) atherosclerosis – senile arteriosclerosis;
e) atherosclerosis – allergic arteriosclerosis.

3. The types of arteriosclerosis do not include:
Variants of answer:
a) atherosclerosis;
b) arteriolosclerosis;
c) congenital aneurysm of the vessel;
d) Monckeberg medial calcific sclerosis;
e) inflammatory sclerosis.

4. List the factors that play a major role in the etiology of atherosclerosis:
Variants of answer:
a) alimentary;
b) exchange;
c) hereditary;
d) hemodynamic;
e) all answers are correct.

5. Specify the wall of the artery, which is affected in atherosclerosis:
Variants of answer:
a) outer;
b) medium;

c) outer and middle;
d) internal;
e) perivascular tissue.

6. Name the type of uncomplicated macroscopic changes in the intima of arteries in atherosclerosis:

Variants of answer:
a) parietal thrombosis;
b) ulceration;
c) fibrous plaques;
d) intramural hematoma;
e) atherocalcinosis.

7. Name the types of complicated macroscopic changes in the intima of arteries in atherosclerosis:

Variants of answer:
a) parietal thrombosis;
b) parietal thrombosis, ulceration;
c) intramural hematoma;
d) fat stains and stripes;
e) parietal thrombosis, ulceration, intramural hematoma.

8. Give a macroscopic description of complicated changes in the intima of arteries in atherosclerosis:

Variants of answer:
a) intima rough, bumpy, with ulceration and parietal thrombi;
b) intima is smooth;
c) fatty spots and stripes in the intima;
d) plaques of stony density;
e) white-yellow plaques in the intima.

9. Name the type of calcification, depending on the pathogenesis, in atherosclerotic plaques:

Variants of answer:
a) metabolic;
b) dystrophic;
c) metastatic;
d) secondary;
e) primary.

10. Specify the origin of foam cells in atherosclerotic plaques:

Variants of answer:
a) granulocytes;
b) macrophages;

c) lymphocytes;
d) plasmocytes;
e) histocytes.

11. Describe the morphogenesis of intramural hematomas in the thickness of an atherosclerotic plaque:

Variants of answer:

a) rupture of plaque cap;
b) by thickening the walls of blood vessels in the plaque;
c) by diapedesis from the lumen of the vessel;
d) by diapedesis from newly formed vessels in the plaque;
e) by tearing the wall of an artery.

12. Describe the morphogenesis of atherosclerotic plaque ulceration:

Variants of answer:

a) plaque encapsulation;
b) development of an intramural hematoma followed by rupture of the plaque cap;
c) rupture of the vessel;
d) corrosion of the plaque cap;
e) due to atherocalcinosis.

13. Specify morphological changes in internal organs as a result of chronic ischemia in atherosclerosis:

Variants of answer:

a) infarction;
b) gangrene;
c) hemorrhages;
d) dystrophy and atrophy;
e) necrosis.

14. Specify morphological changes in the internal organs as a result of acute ischemia in atherosclerosis:

Variants of answer:

a) infarction;
b) hyalinosis;
c) hemorrhage;
d) dystrophy and atrophy;
e) stromal sclerosis.

15. Name the clinical and anatomical form of atherosclerosis, in which uremia develops:

Variants of answer:

a) atherosclerosis of the arteries of the lower extremities;

b) atherosclerosis of the mesenteric arteries;
c) atherosclerosis of the renal arteries;
d) atherosclerosis of the arteries of the brain;
e) atherosclerosis of the aorta.

16. Name the clinical and anatomical form of atherosclerosis, in which intestinal gangrene develops:

Variants of answer:
a) atherosclerosis of the arteries of the lower extremities;
b) atherosclerosis of the mesenteric arteries;
c) atherosclerosis of the renal arteries;
d) atherosclerosis of the arteries of the brain;
e) atherosclerosis of the aorta.

17. Specify the reason for the development of gangrene of the lower extremities in atherosclerosis:

Variants of answer:
a) thrombosis of the veins of the lower extremities;
b) spasm of the arteries of the lower extremities;
c) thrombosis of the arteries of the lower extremities;
d) lymphostasis;
e) thromboembolism of the veins of the lower extremities.

18. Specify the reason for the development of intestinal gangrene in atherosclerosis:

Variants of answer:
a) Budd–Chiari syndrome;
b) thromboembolism of the mesenteric arteries;
c) venous thrombosis;
d) vasospasm;
e) functional overstrain in conditions of circulatory failure.

19. What cannot happen in aortic atherosclerosis:

Variants of answer:
a) pulmonary embolism;
b) iliac arteries embolism;
c) mesenteric arteries embolism;
d) renal arteries embolism;
e) celiac trunk embolism.

20. Specify the characteristic changes in the kidneys in atherosclerosis of the renal arteries:

Variants of answer:
a) nephrosclerosis;

b) glomerulonephritis;
c) hydronephrosis;
d) pyelonephritis;
e) kidney infarction.

21. Name the type of macroscopic changes in atherosclerosis:
Variants of answer:
a) atherosclerosis;
b) lipoidosis;
c) fat stains and stripes;
d) liposclerosis;
e) hyalinosis.

22. Name the clinical and morphological form of atherosclerosis:
Variants of answer:
a) functional;
b) mesenteric;
c) latent;
d) prelipid;
e) generalized.

23. Name the type of macroscopic changes in atherosclerosis:
Variants of answer:
a) atheromatosis;
b) lipoidosis;
c) fibrous plaques;
d) sclerosis;
e) hyalinosis.

24. Describe atherocalcinosis:
Variants of answer:
a) metastatic calcification of atheromatous masses;
b) dystrophic calcification of atheromatous masses;
c) metabolic calcification of atheromatous masses;
d) hyalinosis of the arteries;
e) arterial lipoidosis.

25. Name a synonym for primary arterial hypertension:
Variants of answer:
a) symptomatic hypertension;
b) unclear hypertension;
c) secondary hypertension;
d) essential hypertension;
e) neurogenic hypertension.

26. Pathological conditions that can lead to symptomatic hypertension are listed correctly, except:

Variants of answer:

a) diseases of the central nervous system;
b) liver disease;
c) kidney disease;
d) diseases of the endocrine system;
e) vascular diseases.

27. Name the types of arterial hypertension depending on the nature of its course:

Variants of answer:

a) primary and secondary;
b) essential and secondary;
c) benign and malignant;
d) metastatic;
e) renal and endocrine.

28. All of the following are signs of malignant hypertension except:

Variants of answer:

a) reduction of the lumen of the vessel;
b) spasm of arterioles;
c) hemosiderosis;
d) hemorrhages;
e) infarction.

29. Morphological manifestations of hypertensive crisis include all of the following except:

Variants of answer:

a) spasm of arterioles;
b) plasma impregnation of the arteriole wall;
c) fibrinoid necrosis of the arteriole wall;
d) erythrocyte diapedesis and thrombosis;
e) hyalinosis.

30. Name the change in the brain tissue that develops during a hypertensive crisis:

Variants of answer:

a) plasmatic impregnation of the walls of arterioles;
b) expansion of the 4th ventricle of the brain;
c) diapedetic cerebral hemorrhage;
d) senile dementia;
e) brain cyst.

31. Macroscopic characteristics of the kidneys in the benign course of arterial hypertension:

Variants of answer:

a) kidneys are reduced in size, the surface is fine-grained;

b) kidneys are enlarged;

c) kidneys are red;

d) kidneys are brown;

e) all answers are wrong.

32. Specify the clinical expression of arteriolosclerotic nephrosclerosis in arterial hypertension:

Variants of answer:

a) acute heart failure;

b) chronic heart failure;

c) acute renal failure;

d) chronic renal failure;

e) amyloidosis.

33. Specify the changes that develop in the aorta in arterial hypertension:

Variants of answer:

a) gummous infiltration, sclerosis;

b) amyloidosis;

c) atherosclerosis, hyperelastosis;

d) congenital aneurysm;

e) caseous necrosis.

34. Name the morphological changes characteristic of a hypertensive crisis:

Variants of answer:

a) hyalinosis, sclerosis, calcification;

b) fibrinoid necrosis of arterioles, spasm of arterioles, plasmorrhagia;

c) atherosclerosis, hyperelastosis;

d) perivascular sclerosis;

e) elastofibrosis, atheromatosis.

35. Severe atherosclerosis of the abdominal aorta in arterial hypertension can be complicated by the development of:

Variants of answer:

a) cerebral infarction;

b) intestinal gangrene;

c) myocardial infarction;

d) lung infarction;

e) pulmonary embolism.

36. Name the characteristic changes in arterioles in arterial hypertension:

Variants of answer:

a) atherosclerosis;

b) hyalinosis;

c) liposclerosis;

d) atheromatosis;

e) atherocalcinosis.

37. Name the main factors that are most important in the development of arterial hypertension:

Variants of answer:

a) stress, salt intake;

b) viral infection;

c) protein starvation;

d) food rich in carbohydrates;

e) alcohol consumption.

38. Specify the type of vessels that are most often affected in arterial hypertension:

Variants of answer:

a) venules;

b) capillaries, arterioles;

c) arteries of the muscular type;

d) arterioles;

e) arteries of the elastic and musculo-elastic type.

39. Name the disease in which cerebral hematoma often develops:

Variants of answer:

a) atherosclerosis;

b) posthemorrhagic anemia;

c) malignant anemia;

d) arterial hypertension;

e) multiple myeloma.

40. Name the morphological manifestation of the cerebral form of arterial hypertension:

Variants of answer:

a) meningitis;

b) hemorrhage;

c) encephalitis;

d) abscess;

e) gangrene.

41. Define ischemic heart disease:

Variants of answer:

a) myocardial disease due to exogenous intoxications;
b) myocardial disease due to endogenous intoxications;
c) myocardial disease due to exposure to infection;
d) myocardial disease due to insufficiency of the coronary circulation;
e) myocardial disease due to metabolic disorders.

42. Background diseases in IHD do not include:

Variants of answer:

a) rheumatism;
b) diabetes mellitus;
c) symptomatic hypertension;
d) atherosclerosis;
e) essential hypertension.

43. Pathogenetic factors in the development of coronary artery disease do not include:

Variants of answer:

a) hyperlipidemia, smoking;
b) arterial hypertension;
c) overweight;
d) sedentary lifestyle;
e) chronic infection.

44. List the forms of acute IHD:

Variants of answer:

a) myocardial infarction;
b) sudden coronary death;
c) acute ischemic myocardial dystrophy;
d) all answers are correct;
e) all answers are wrong.

45. Specify myocardial changes that can be attributed to acute IHD:

Variants of answer:

a) metabolic damage to the myocardium;
b) fatty degeneration of the myocardium;
c) myocardial infarction;
d) granulomatous myocarditis;
e) cardiomyopathy.

46. Name the stages of myocardial infarction:

Variants of answer:

a) necrotic;

b) organization;
c) ischemic;
d) all answers are correct;
e) all answers are wrong.

47. Name the type of myocardial infarction depending on the localization of the focus of necrosis:

Variants of answer:
a) transmural;
b) intramural;
c) subendocardial;
d) subepicardial;
e) all answers are correct.

48. Specify the time of occurrence of the necrotic stage of myocardial infarction from the moment of the first signs of ischemia:

Variants of answer:
a) 6–8 hours;
b) more than 12 hours;
c) 10–12 hours;
d) up to 6 hours;
e) 2 hours.

49. Specify the fatal complications of acute myocardial infarction:

Variants of answer:
a) kidney infarction;
b) pulmonary infarction;
c) rupture of the heart (myomalacia), asystole;
d) cerebral infarction;
e) supravalvular aortic rupture.

50. Specify the causes of death in acute IHD:

Variants of answer:
a) cardiogenic shock;
b) acute heart failure;
c) ventricular fibrillation;
d) asystole;
e) all answers are correct.

51. Specify the favorable outcome of myocardial infarction:

Variants of answer:
a) scarring;
b) purulent fusion;
c) myomalacia;

d) the formation of an acute aneurysm of the heart;
e) cyst formation.

52. Specify changes in cardiomyocytes in acute focal ischemic myocardial dystrophy:

Variants of answer:
a) nucleus lysis;
b) the disappearance of glycogen;
c) lysis of the cytoplasm;
d) increase in the amount of glycogen;
e) coagulation of the cytoplasm.

53. Morphological characteristics of acute aneurysm of the heart:

Variants of answer:
a) more often occurs in the wall of the right ventricle;
b) often occurs in the wall of the left ventricle, the wall of the aneurysm is represented by necrotic muscle tissue;
c) the wall of the aneurysm is represented by scar tissue;
d) the aneurysm wall is calcified;
e) there is no correct answer.

54. Complications that can develop in a patient with an acute aneurysm of the heart include everything, except:

Variants of answer:
a) rupture of the aneurysm wall;
b) tamponade of the pericardial cavity;
c) pulmonary embolism;
d) ischemic cerebral infarction;
e) kidney infarction.

55. Specify the fatal complication of myocardial infarction:

Variants of answer:
a) IHD;
b) rupture of the heart;
c) cardiosclerosis;
d) development of chronic aneurysm of the heart;
e) gangrene of the lung.

56. Specify a possible non-cardiac complication associated with acute cardiac aneurysm:

Variants of answer:
a) pneumonia;
b) gangrene of the intestine;

c) hepatitis;
d) lung gangrene;
e) brain hemorrhage.

57. Specify a pathological process that can be detected in organs as an expression of acute heart failure in myocardial infarction:

Variants of answer:

a) chronic venous congestion;
b) lung edema;
c) sclerosis;
d) cyanotic induration;
e) atrophy of internal organs.

58. Specify the macroscopic changes in the coronary arteries that cannot be detected in patients with IHD:

Variants of answer:

a) fat stains and stripes;
b) fibrous plaques;
c) complicated lesions;
d) calcification;
e) microaneurysms.

59. Causes of death associated with complications of myocardial infarction are listed correctly, except:

Variants of answer:

a) asystole;
b) ventricular fibrillation;
c) heart rupture or acute aneurysm;
d) cardiogenic shock;
e) femoral thromboembolism.

60. Specify the most common cause of death in chronic ischemic heart disease:

Variants of answer:

a) coma;
b) cardiogenic shock;
c) chronic heart failure;
d) acute vascular insufficiency;
e) chronic lung failure.

61. Name the morphological expression of chronic ischemic heart disease:

Variants of answer:

a) myocardial fatty degeneration;
b) diffuse cardiosclerosis;

c) myocardial hypertrophy;
d) myocardial infarction;
e) concentric myocardial hypoplasia.

62. Non-cardiac complications that can develop in a patient with chronic aneurysm of the heart with parietal thrombosis as a result of thromboembolism include all of the following, except:

Variants of answer:

a) cerebral infarction;
b) gangrene of the intestine;
c) infarction of the spleen;
d) pulmonary embolism;
e) iliac thromboembolism.

63. Name the change that can develop in the brain in a patient with chronic aneurysm of the heart:

Variants of answer:

a) hemorrhage;
b) abscess;
c) ischemic infarction;
d) meningitis;
e) brain atrophy.

64. Name the common causes of death in chronic ischemic heart disease:

Variants of answer:

a) chronic heart failure, thromboembolism in the systemic circulation;
b) chronic pulmonary insufficiency;
c) chronic renal failure;
d) pulmonary embolism;
e) there is no correct answer.

65. Specify the changes in the organs that can be detected in a patient with chronic heart aneurysm who died from chronic heart failure, except for:

Variants of answer:

a) porphyritic spleen;
b) nutmeg liver;
c) cyanotic induration of the spleen;
d) anasarca;
e) brown lung induration.

13. SYSTEMIC CONNECTIVE TISSUE DISEASES. RHEUMATISM. VASCULITIS

Choose one correct variant of answer

1. Define the term "rheumatic diseases":

Variants of answer:

a) diseases of the connective tissue;
b) diseases with systemic manifestations;
c) collagen diseases;
d) connective tissue diseases with immune disorders;
e) autoimmune diseases.

2. Specify the processes that form the structural basis of rheumatism:

Variants of answer:

a) exudation;
b) progressive disorganization of connective tissue;
c) immunopathological processes;
d) damage to blood vessels;
e) progressive disorganization of connective tissue, immunopathological processes.

3. The clinical and morphological features of rheumatic diseases do not include:

Variants of answer:

a) the presence of a focus of chronic infection;
b) violation of immune homeostasis;
c) generalized vasculitis;
d) systemic and progressive disorganization of connective tissue;
e) predominantly acute undulating course.

4. Specify the features of the clinical course of rheumatic diseases:

Variants of answer:

a) long latent period;
b) chronic undulating course;
c) quick death occurs;
d) the onset of the disease is more often in old age;
e) well treatable.

5. Name the factors that are important for the development of rheumatic diseases:

Variants of answer:

a) infection, genetic factors;

b) physical activity;
c) overweight;
d) hypodynamia;
e) hypoglycemia.

6. Specify where, except for the myocardium, rheumatic granulomas can be found:

Variants of answer:
a) valvular and parietal endocardium;
b) only valvular endocardium;
c) aorta;
d) only epicardium;
e) valvular endocardium, parietal endocardium, epicardium.

7. Name one of the phases of connective tissue disorganization:

Variants of answer:
a) edema;
b) formation of circulating immune complexes;
c) mesenchymal dystrophy;
d) formation of lipohyalin;
e) mucoid swelling.

8. Name the outcome of rheumatic myocarditis:

Variants of answer:
a) pericarditis;
b) chronic aneurysm;
c) endocarditis;
d) diffuse cardiosclerosis;
e) myocardial infarction.

9. Specify microscopic changes in cardiomyocytes in rheumatic myocarditis:

Variants of answer:
a) sclerosis;
b) dystrophy;
c) atrophy;
d) hyperplasia;
e) hypertrophy.

10. Specify the changes in the heart valves that are characteristic of the period of remission in rheumatism:

Variants of answer:
a) sclerosis, hyalinosis;
b) amyloidosis;
c) mucoid swelling;

d) fibrinoid swelling;
e) thrombotic overlays.

11. Name the etiological factor characteristic of rheumatism:
Variants of answer:
a) E. coli;
b) β-hemolytic streptococcus group A;
c) Streptococcus pneumoniae;
d) Staphylococcus aureus;
e) Mycobacterium tuberculosis.

12. Name the factors that play an important role in the pathogenesis of rheumatism:
Variants of answer:
a) cross-reactive antibodies;
b) proteolytic enzymes of streptococcus;
c) viruses;
d) cross-reactive antibodies and proteolytic enzymes of streptococcus;
e) there is no correct answer.

13. Specify the characteristic morphological expression of cellular inflammatory reactions in rheumatism:
Variants of answer:
a) rheumatic atherosclerosis;
b) rheumatic phlebitis;
c) gumma;
d) rheumatic granuloma;
e) pannus.

14. Specify the most common clinical and morphological form of rheumatism:
Variants of answer:
a) cardiovascular;
b) paralytic;
c) polyarthritic;
d) cerebral;
e) nodose.

15. Give the name of the pathological process in which all the membranes of the heart are affected:
Variants of answer:
a) pericarditis;
b) endocarditis;
c) polycarditis;

d) total myocarditis;
e) pancarditis.

16. Specify the valves of the heart that are most often affected in rheumatism:
Variants of answer:
a) tricuspid;
b) pulmonary;
c) aortic, mitral;
d) none of the above;
e) all valves equally.

17. Specify histological changes that cannot be detected in endocarditis:
Variants of answer:
a) mucoid swelling;
b) fibrinoid necrosis;
c) amyloid deposits;
d) cell proliferation;
e) blood clots on the valve surface.

18. Specify the pathological process underlying diffuse endocarditis:
Variants of answer:
a) fibrinoid swelling;
b) hyalinosis;
c) sclerosis;
d) mucoid swelling;
e) mesenchymal dystrophy.

19. Specify the reason for the formation of thrombotic deposits on the valve in rheumatism:
Variants of answer:
a) mucoid swelling;
b) sclerosis;
c) endothelial necrobiosis;
d) hyalinosis;
e) formation of pannus.

20. Specify the changes on the heart valves that allow distinguishing between acute and recurrent-verrucous endocarditis:
Variants of answer:
a) sclerosis, hyalinosis;
b) amyloidosis;
c) inflammatory cellular reactions;
d) fibrinoid necrosis;
e) thrombotic overlays.

21. Specify the possible causes of death in patients with valvular endocarditis:

Variants of answer:

a) hemorrhagic syndrome;

b) heart failure, thromboembolic syndrome;

c) kidney failure;

d) liver failure;

e) asystole.

22. Specify the most common cause of death in patients with rheumatic heart disease:

Variants of answer:

a) chronic heart failure;

b) pulmonary insufficiency;

c) thromboembolism;

d) sepsis;

e) kidney failure.

23. Specify the general pathological process that can be detected at the autopsy of those who died from chronic heart failure:

Variants of answer:

a) amyloid dystrophy;

b) diffuse pneumonitis;

c) generalized venous congestion;

d) lung edema;

e) arterial hyperemia.

24. Specify the form of myocarditis, which is most common in children:

Variants of answer:

a) nodular productive;

b) intermediate;

c) diffuse interstitial exudative;

d) focal interstitial granulomatous;

e) mixed.

25. Specify the form of myocarditis, which is most common in adults:

Variants of answer:

a) nodular productive;

b) intermediate;

c) diffuse interstitial exudative;

d) focal interstitial exudative;

e) mixed.

26. Name the characteristic morphological formation detected in rheumatic myocarditis:

Variants of answer:

a) fibroma;
b) granuloma;
c) fibrinoid;
d) gumma;
e) cardiosclerosis.

27. Specify the pathological process that can be seen in the center of rheumatic granuloma:

Variants of answer:

a) sclerosis;
b) blood clot;
c) amyloid;
d) fibrinoid necrosis;
e) colliquative necrosis.

28. Name the cells that do not take part in the formation of rheumatic granuloma:

Variants of answer:

a) fibroblasts;
b) neutrophils;
c) lymphocytes;
d) plasma cells;
e) macrophages.

29. Specify the cells that predominate in mature rheumatic granuloma:

Variants of answer:

a) fibroblasts;
b) epithelioid cells;
c) macrophages;
d) neutrophils;
e) eosinophils.

30. Specify the main function of macrophages in mature rheumatic granuloma:

Variants of answer:

a) fibrin synthesis;
b) collagen synthesis;
c) synthesis of amyloid;
d) phagocytosis;
e) erythrophagy.

31. What is the main function of fibroblasts in rheumatic granuloma:
Variants of answer:
a) fibrin lysis;
b) fibrin synthesis;
c) collagen synthesis;
d) fibrinoid synthesis;
e) amyloid lysis.

32. Specify the time cycle of development of rheumatic granuloma:
Variants of answer:
a) 3–4 months;
b) 3–4 days;
c) 1–1.5 years;
d) 6–8 months;
e) up to 2 years.

33. Specify nonspecific tissue reaction as an outcome of rheumatism:
Variants of answer:
a) hyalinosis;
b) lymphocytic and histiocytic infiltrates;
c) vasculitis;
d) amyloidosis;
e) necrosis.

34. Specify a variant of fibrinous inflammation that develops on the pericardium in rheumatism:
Variants of answer:
a) diffuse;
b) croupous;
c) diphtheritic;
d) diphtheria;
e) mixed.

35. Specify the favorable outcome of pericarditis:
Variants of answer:
a) organization;
b) autolysis;
c) petrification;
d) resorption of exudate;
e) encapsulation.

36. Specify the outcome of rheumatic vasculitis:
Variants of answer:
a) amyloidosis;

b) plasma impregnation;
c) edema;
d) sclerosis;
e) formation of a microaneurysm.

37. Name the changes in the nervous system in the cerebral form of rheumatism:

Variants of answer:
a) vasculitis;
b) degeneration of neurons;
c) hemorrhages;
d) all answers are correct;
e) all answers are wrong.

38. Name the morphological changes that are not characteristic of a rheumatic attack:

Variants of answer:
a) polyserositis;
b) lipodystrophy;
c) vasculitis;
d) damage to skeletal muscles;
e) erythema nodosa.

39. Name the main complications of rheumatic fever:

Variants of answer:
a) tamponade of the pericardial cavity;
b) chronic heart failure, thromboembolic syndrome;
c) croupous pneumonia;
d) pericarditis;
e) pleuritis.

40. List the organs and tissues that are not affected by rheumatoid arthritis:

Variants of answer:
a) articular cartilage;
b) connective tissue of the membranes of the joints;
c) periarticular connective tissue;
d) microvessels;
e) large vessels.

41. Define the term "rheumatoid factor":

Variants of answer:
a) immunoglobulins acting as antigens;
b) complement system;

c) immunoglobulins that act as antibodies;
d) circulating immune complexes;
e) T-killer lymphocytes.

42. Specify the anatomical structure in which rheumatoid factor is synthesized:

Variants of answer:
a) mucous membranes;
b) kidneys;
c) lymph nodes;
d) serous membranes;
e) liver.

43. Specify the characteristic outcome of rheumatoid synovitis:

Variants of answer:
a) resorption of exudate;
b) lysis of granulation tissue;
c) amyloidosis;
d) fibrous-osseous ankylosis;
e) fibrinoid necrosis.

44. List the organs and tissues that are predominantly affected in ankylosing spondylitis:

Variants of answer:
a) small joints;
b) large joints;
c) kidneys;
d) cardiovascular system;
e) articular-ligamentous apparatus of the spine.

45. List the organs and tissues that are predominantly affected in systemic lupus erythematosus:

Variants of answer:
a) skin and kidneys;
b) kidneys and vessels;
c) only vessels;
d) liver;
e) skin, kidneys and vessels.

46. Specify the main etiological factor of systemic lupus erythematosus:

Variants of answer:
a) mycoplasmas;
b) fungi;
c) viruses;

d) β-hemolytic streptococcus;
e) staphylococcus.

47. Clinical and morphological features of systemic lupus erythematosus are indicated correctly, with the exception of:

Variants of answer:

a) young women often get sick;
b) polymorphism of manifestations;
c) generalized nature of the disease;
d) great value of hereditary predisposition;
e) benign course.

48. Name the tissue and cellular changes that are not typical for systemic lupus erythematosus:

Variants of answer:

a) necrosis and dystrophic changes in the connective tissue;
b) subacute interstitial inflammation in the organs;
c) capillaritis;
d) polyserosites;
e) porphyria.

49. Name the cells that predominate in the cell infiltrate in systemic lupus erythematosus:

Variants of answer:

a) macrophages;
b) plasma cells;
c) lymphocytes;
d) all answers are correct;
e) all answers are wrong.

50. Specify the changes that are not typical for the microscopic picture of lupus nephritis:

Variants of answer:

a) wire loops;
b) hematoxylin bodies;
c) fibrinoid necrosis;
d) hyaline thrombi;
e) amyloidosis.

51. Specify the cause of death of patients with lupus nephritis:

Variants of answer:

a) thromboembolic syndrome;
b) uremia;
c) hemorrhagic syndrome;

d) anemia;
e) sepsis.

52. Name the organ that is most often affected in systemic scleroderma:
Variants of answer:
a) connective tissue;
b) skin;
c) liver;
d) joints;
e) nervous system.

53. List the organs that are most often affected in dermatomyositis:
Variants of answer:
a) connective tissue;
b) only striated muscles;
c) joints;
d) only skin;
e) striated muscles and skin.

54. List the organs and tissues that are most often affected in periarteritis nodosa:
Variants of answer:
a) connective tissue;
b) myocardium;
c) large arteries;
d) arteries of medium and small caliber;
e) venules.

14. ACUTE RESPIRATORY INFECTIONS OF THE LUNGS

Choose one correct variant of answer

1. Acute inflammatory diseases of the lungs do not include:
Variants of answer:
a) pleuropneumonia;
b) interstitial pneumonia;
c) bronchopneumonia;
d) acute emphysema of the lungs;
e) croupous pneumonia.

2. Specify synonyms of croupous pneumonia:
Variants of answer:
a) interstitial pneumonia;
b) only pleuropneumonia;
c) bronchopneumonia;
d) only lobar pneumonia;
e) pleuropneumonia and lobar pneumonia.

3. Specify forms of interstitial pneumonia:
Variants of answer:
a) bronchopneumonia;
b) peribronchial and interalveolar;
c) interlobular;
d) lobular;
e) peribronchial, interlobular, interalveolar.

4. The most common causative agents of croupous pneumonia:
Variants of answer:
a) Streptococcus pneumoniae;
b) Staphylococcus aureus;
c) Proteus mirabilis;
d) Escherichia coli;
e) Klebsiella pneumoniae.

5. Extrapulmonary complications of croupous pneumonia include:
Variants of answer:
a) pleural empyema;
b) bronchopneumonia;
c) lung abscess;
d) purulent pleuritis;
e) purulent pericarditis.

6. Specify the ways of spread of infection in bronchopneumonia:
Variants of answer:
a) hematogenous;
b) intrabronchial;
c) peribronchial;
d) all answers are correct;
e) there is no correct answer.

7. Complications of croupous pneumonia include:
Variants of answer:
a) lung edema;
b) steatohepatosis;

c) malignancy;
d) cor pulmonare;
e) brown lung induration.

8. In accordance with the size of the foci of inflammation, focal pneumonia can be:

Variants of answer:
a) microbial;
b) uremic;
c) miliary;
d) mechanical;
e) unspecified.

9. Specify the form of interstitial pneumonia:

Variants of answer:
a) focal pneumonia;
b) pleuropneumonia;
c) interlobular;
d) periaortic;
e) peritracheal.

10. Specify the nature of inflammation in the first stage of lobar pneumonia:

Variants of answer:
a) purulent;
b) purulent-hemorrhagic;
c) fibrinous;
d) croupous;
e) serous.

11. The term "carnification" means:

Variants of answer:
a) purulent-fibrinous inflammation in the pleura and lungs;
b) the formation of bronchiectasis;
c) brown induration of the lungs;
d) organization of fibrinous exudate;
e) acute destructive process in the lungs.

12. Specify a synonym for bronchopneumonia:

Variants of answer:
a) pleuropneumonia;
b) lobar pneumonia;
c) focal pneumonia;
d) interstitial pneumonia;
e) croupous pneumonia.

13. Specify one of the variants of hepatization in lobar pneumonia:

Variants of answer:

a) red hepatization;
b) yellow hepatization;
c) green hepatization;
d) central hepatization;
e) peripheral hepatization.

14. Bronchopneumonia can be caused by all of the following except:

Variants of answer:

a) physical factors;
b) chemical factors;
c) viruses;
d) regenerative factors;
e) microbial agents.

15. Specify the nature of inflammation, which is characteristic of the stage of leukocyte infiltration in croupous pneumonia:

Variants of answer:

a) serous;
b) purulent;
c) hemorrhagic;
d) fibrinous;
e) croupous.

16. Mandatory morphological components of focal pneumonia are:

Variants of answer:

a) bronchitis;
b) bronchitis and pleurisy;
c) bronchiolitis;
d) bronchiolitis and alveolitis;
e) bronchitis, pleurisy and alveolitis.

17. In the outcome of interlobular pneumonia, all of the following can develop, except:

Variants of answer:

a) pneumofibrosis;
b) pneumocirrhosis;
c) bronchiectasis;
d) cor pulmonary;
e) croupous pneumonia.

18. Specify the type of inflammation observed in the gray hepatization stage of lobar pneumonia:

Variants of answer:

a) catarrhal;
b) fibrinous-purulent;
c) granulomatous;
d) serous;
e) productive.

19. Specify a synonym for bronchopneumonia:

Variants of answer:

a) interstitial pneumonia;
b) pneumonitis;
c) pleuropneumonia;
d) focal pneumonia;
e) caseous pneumonia.

20. Acute destructive processes in the lungs include:

Variants of answer:

a) bronchopneumonia;
b) croupous pneumonia;
c) abscess;
d) heart attack;
e) pneumoconiosis.

21. For focal pneumonia is not typical:

Variants of answer:

a) endomesobronchitis;
b) panbronchitis;
c) transient bronchiectasis;
d) malignancy;
e) alveolitis.

22. What type of inflammation in pleura is most common during croupous pneumonia:

Variants of answer:

a) catarrhal inflammation;
b) fibrinous inflammation;
c) granulomatous inflammation;
d) hemorrhagic inflammation;
e) interstitial inflammation.

23. The features of focal pneumonia in newborns and children of the first year of life include all of the following, except:

Variants of answer:

a) relatively mild;
b) predominant localization in the posterior segments of the lungs;
c) frequent development on the background of aspiration;
d) formation of hyaline membranes;
e) frequent and early development of complications.

24. Gangrene of the lung is caused by:

Variants of answer:

a) viruses;
b) mushrooms;
c) poisons of endogenous origin;
d) pyogenic microorganisms;
e) putrefactive bacteria.

25. Complications of croupous pneumonia are classified into:

Variants of answer:

a) pulmonary, extrapulmonary;
b) acute, chronic;
c) combined, transitory;
d) primary, secondary;
e) stable, unstable.

26. Pulmonary complications of croupous pneumonia include:

Variants of answer:

a) fibrinous pleurisy;
b) serous pericarditis;
c) purulent pericarditis;
d) abscess and gangrene of the lung;
e) liver abscess.

27. The stages of the course of croupous pneumonia do not include:

Variants of answer:

a) congestion;
b) red hepatization;
c) gray hepatization;
d) resolution stage;
e) stage of complications.

28. Taking into account the etiological factor, bronchopneumonia cannot be:
Variants of answer:
a) staphylococcal;
b) streptococcal;
c) intermediate;
d) pneumococcal;
e) viral.

15. CHRONIC NONSPECIFIC LUNG DISEASES

Choose one correct variant of answer

1. There are the following types of pulmonary atelectasis:
Variants of answer:
a) obstructive and suppressive;
b) compressive and acinar;
c) interstitial and lobar;
d) centriacinar and panacinar;
e) obstructive and compressive.

2. Anthracosis of the lungs can be complicated by:
Variants of answer:
a) bronchopneumonia;
b) pleuropneumonia;
c) lung abscess;
d) gangrene of the lungs;
e) no correct answer.

3. Chronic nonspecific lung disease includes all of the following except:
Variants of answer:
a) pneumosclerosis;
b) chronic bronchitis;
c) usual interstitial pneumonia;
d) bronchiectasis;
e) viral interstitial pneumonia.

4. During an attack of bronchial asthma in the bronchi we can find:
Variants of answer:
a) accumulation of giant multinucleated cells;
b) proliferation of fibroblasts;
c) accumulation of eosinophils;

d) accumulation of leukocytes;
e) mucus hyposecretion.

5. With panacinar emphysema is not observed:
Variants of answer:
a) predominance of changes in large bronchi;
b) predominance of changes in small bronchi;
c) expansion of the trachea;
d) expansion of the entire acinus;
e) lung enlargement.

6. By the nature of the exudate, pleurisy cannot be:
Variants of answer:
a) serous;
b) fibrinous;
c) catarrhal;
d) purulent;
e) hemorrhagic.

7. Microscopic examination of the bronchial wall in chronic bronchitis reveals:
Variants of answer:
a) disappearance of goblet cells;
b) atrophy of the muscle layer;
c) only epidermal metaplasia of the epithelium;
d) the formation of polyps;
e) muscle atrophy, epidermal epithelial metaplasia, polyp formation.

8. Collapse of the lungs does not develop with:
Variants of answer:
a) traumatic pneumothorax;
b) compression of a large bronchus by a tumor from the outside;
c) hydrothorax;
d) spontaneous pneumothorax;
e) pleural empyema.

9. Specify the most common cause of death in silicosis:
Variants of answer:
a) uremia;
b) pulmonary and renal insufficiency;
c) hemorrhage in the brain;
d) primary pulmonary hypertension;
e) secondary tuberculosis.

10. With bronchial asthma, there are:

Variants of answer:

a) forced position of the patient;
b) difficulty in exhaling;
c) violation of bronchial patency;
d) expiratory dyspnea;
e) all answers are correct.

11. Types of emphysema do not include:

Variants of answer:

a) chronic diffuse obstructive;
b) acute diffuse obstructive;
c) saccular;
d) senile;
e) compensatory (vicarious).

12. Violations of the drainage function in chronic bronchitis does not lead to the following bronchopulmonary complication:

Variants of answer:

a) lung atelectasis;
b) pneumofibrosis;
c) pleuropneumonia;
d) obstructive pneumonia;
e) bronchiectasis.

13. Pneumosclerosis is characterized by:

Variants of answer:

a) hypertrophy of the left ventricle of the heart;
b) cor pulmonale;
c) mitral valve stenosis;
d) aortic valve stenosis;
e) myocardial infarction.

14. Describe chronic focal pulmonary emphysema:

Variants of answer:

a) is panacinar;
b) is centroacinar;
c) also called cicatricial or perifocal;
d) is centroacinar, occurs around old tuberculous foci;
e) is panacinar, also called cicatricial or perifocal, occurs around old tuberculous foci.

15. Silicosis is caused by prolonged inhalation of:

Variants of answer:

a) chlorine vapor;

b) organic dust;
c) silicon dioxide;
d) coal dust;
e) household dust.

16. Bronchiectasis can be:
Variants of answer:
a) acquired;
b) endobronchial;
c) panacinar;
d) spiral;
e) there is no correct answer.

17. Emphysema may be complicated by:
Variants of answer:
a) only cor pulmonale;
b) spontaneous pneumothorax and subcutaneous emphysema;
c) only spontaneous pneumothorax;
d) cor pulmonale and subcutaneous emphysema;
e) cor pulmonale, spontaneous pneumothorax and subcutaneous emphysema.

18. Silicosis of the lungs manifests itself in the following forms:
Variants of answer:
a) nodular, diffuse sclerotic;
b) branched, not branched;
c) endophytic simple;
d) exophytic complex;
e) there is no correct answer.

19. The following mechanisms of development of chronic nonspecific lung diseases are distinguished:
Variants of answer:
a) pleurogenic, bronchitogenic, pneumoniogenic;
b) bronchitogenic;
c) pneumoniogenic;
d) bronchitogenic, pleurogenic, pneumonitogenic;
e) bronchitogenic, pneumoniogenic, pneumonitogenic.

20. With repeated attacks of bronchial asthma in the lungs does not develop:
Variants of answer:
a) sclerosis of the interalveolar septa;
b) chronic obstructive emphysema;
c) idiopathic panacinar emphysema;
d) hypertrophy of endotheliocytes in capillaries;
e) chronic bronchitis.

21. Bronchiectasis can be:
Variants of answer:
a) primary and secondary;
b) congenital and acquired;
c) saccular and cylindrical;
d) exophytic and endophytic;
e) congenital and acquired; saccular and cylindrical.

22. Lung atelectasis can be caused by:
Variants of answer:
a) hydrothorax;
b) empyema of the pleura;
c) spontaneous pneumothorax;
d) obstruction of the bronchial lumen by a tumor;
e) traumatic pneumothorax.

23. Microscopic examination of the bronchus wall in chronic bronchitis does not reveal:
Variants of answer:
a) accumulation of goblet cells;
b) the appearance of stratified squamous epithelium in the mucous membrane;
c) the presence of an inflammatory infiltrate;
d) accumulation of glycogen in muscle fibers;
e) formation of polyps.

16. DISEASES OF THE GASTROINTESTINAL TRACT

Choose one correct variant of answer

1. Define the term "acute gastritis":
Variants of answer:
a) dystrophic disease of the gastric mucosa;
b) inflammatory disease of the gastric mucosa;
c) dysregenerative disease of the gastric mucosa;
d) an infectious disease with damage to the gastric mucosa;
e) precancerous disease of the stomach.

2. Specify the essence of morphological changes in acute gastritis:
Variants of answer:
a) exudative inflammation of the gastric mucosa;
b) structural reorganization of the gastric mucosa;
c) violation of the regeneration of the gastric mucosa;

d) malignancy of the gastric mucosa;
e) intestinal metaplasia of the epithelium of the stomach.

3. Specify the forms of acute gastritis depending on the mechanism of action of pathogenic factors:

Variants of answer:

a) exogenous, endogenous gastritis;
b) primary, secondary gastritis;
c) type A gastritis, type B gastritis;
d) superficial, diffuse gastritis;
e) atrophic, hypertrophic gastritis.

4. Specify the forms of acute gastritis depending on the localization of the process:

Variants of answer:

a) superficial, deep;
b) with damage to the glands without atrophy of the mucous membrane;
c) atrophic, hypertrophic;
d) focal, diffuse;
e) gastritis type A, gastritis type B.

5. Specify the morphological forms of acute gastritis:

Variants of answer:

a) superficial, diffuse;
b) fibrinous, purulent;
c) with damage to the glands without atrophy of the mucous membrane;
d) phlegmonous-ulcerative, apostematous;
e) atrophic, hypertrophic.

6. Name the variants of the course of acute fibrinous gastritis:

Variants of answer:

a) superficial, deep;
b) catarrhal, erosive;
c) croupous, diphtheritic;
d) primary, secondary;
e) focal, diffuse.

7. Specify the essence of morphological changes in chronic gastritis:

Variants of answer:

a) impaired regeneration and restructuring of the gastric mucosa;
b) necrosis of the gastric mucosa;
c) proliferation of the gastric mucosa;
d) hyalinosis of the vessels of the gastric mucosa;
e) exudative inflammation of the gastric mucosa.

8. The classification of chronic gastritis by pathogenesis does not include:

Variants of answer:

a) type A gastritis;
b) type B gastritis;
c) reflux gastritis;
d) special forms of gastritis;
e) primary, secondary.

9. Specify the forms of chronic gastritis depending on the mechanism of action of pathogenic factors:

Variants of answer:

a) superficial, diffuse;
b) exogenous, endogenous;
c) primary, secondary;
d) gastritis type A, gastritis type B, gastritis type C;
e) acute, chronic.

10. Specify the morphological form of chronic gastritis:

Variants of answer:

a) catarrhal;
b) superficial;
c) purulent;
d) hemorrhagic;
e) mucinous.

11. Specify the form of chronic gastritis, in which intestinal metaplasia of the gastric epithelium develops:

Variants of answer:

a) catarrhal;
b) fibrinous;
c) atrophic;
d) phlegmonous-ulcerative;
e) superficial.

12. Specify the precancerous condition of the stomach epithelium in chronic gastritis:

Variants of answer:

a) atrophy;
b) erosion;
c) dysplasia;
d) desquamation;
e) destruction.

13. Specify the pathological process that underlies the development of gastric erosions:

Variants of answer:

a) deep necrosis of the stomach wall;
b) inflammation of the gastric mucosa;
c) proliferation of the epithelium;
d) superficial necrosis of the gastric mucosa;
e) atrophy of the gastric mucosa.

14. Specify the pathological process that underlies the development of acute gastric ulcer:

Variants of answer:

a) necrosis of the mucous membrane and other layers of the stomach wall;
b) superficial necrosis of the gastric mucosa;
c) pathological regeneration of the gastric mucosa;
d) diffuse purulent inflammation of the gastric mucosa;
e) diffuse hemorrhagic inflammation of the gastric mucosa.

15. Specify the difference between gastric erosion and acute ulcer:

Variants of answer:

a) presence of sclerosis;
b) presence of bleeding;
c) depth of necrosis (with erosion, necrosis is deeper);
d) depth of necrosis (with erosion, necrosis is superficial);
e) depth of inflammation.

16. What is the difference between an acute stomach ulcer and a chronic one:

Variants of answer:

a) depth of necrosis;
b) depth of inflammation;
c) presence of hydrochloric hematin;
d) absence of sclerosis;
e) damage to intramural nerve endings.

17. Specify the pathogenetic factors of a local nature that are important in the development of gastric ulcer:

Variants of answer:

a) impaired acid-peptic factor, disruption of the mucosal barrier;
b) violation of the nervous regulation of the activity of the stomach;
c) violation of the endocrine regulation of the activity of the stomach;
d) autoimmune reactions;
e) there is no correct answer.

18. The state of the level of secretion of hydrochloric acid and gastrin in pyloroduodenal ulcers:

Variants of answer:

a) secretion of hydrochloric acid and gastrin is normal;

b) secretion of hydrochloric acid and gastrin is increased;

c) secretion of hydrochloric acid and gastrin is decreased;

d) secretion of hydrochloric acid is increased, gastrin is decreased;

e) secretion of hydrochloric acid is decreased, gastrin is increased.

19. Specify a classic macroscopic description of an acute stomach ulcer:

Variants of answer:

a) localization on the lesser curvature and in the pyloroduodenal zone;

b) localization in any area of the stomach, the edges are soft, even;

c) the proximal edge is undermined, the distal one is gently sloping;

d) the edges are dense, callused;

e) localization in antrum, the edges are dense, callused.

20. Specify the number and name of the zones that are distinguished in the bottom of a chronic ulcer during an exacerbation of the process:

Variants of answer:

a) 1 zone: scar tissue;

b) 2 zones: scar tissue, epithelium;

c) 3 zones: scar tissue, epithelium, muscle tissue;

d) 4 zones: scar tissue, granulation tissue, necrosis, zone of inflammation;

e) 5 zones: mucosa, submucosa, scar tissue, muscle tissue, serosa.

21. Name the morphological markers of chronic ulcer exacerbation:

Variants of answer:

a) hemorrhage at the bottom of the ulcer;

b) the appearance of hydrochloric hematin;

c) the appearance of fresh foci of necrosis in the bottom of the ulcer, fibrinoid necrosis of the walls of blood vessels in the bottom of the ulcer;

d) the appearance of amputation neuromas in the bottom of the ulcer;

e) appearance of formalin pigment.

22. Specify the main complications of peptic ulcer:

a) gastritis, perigastritis, perforation;

b) duodenitis, periduodenitis, bleeding;

c) perforation, penetration, bleeding;

d) perforation, bleeding, malignization;

e) penetration, bleeding, malignization.

23. Name the inflammatory complications of gastric ulcer and duodenal ulcer:

Variants of answer:

a) hepatitis;

b) gastritis, perigastritis, duodenitis, periduodenitis;
c) phlegmon of the stomach;
d) gangrene of the intestine;
e) intestinal obstruction.

24. Specify the precancerous changes in the gastric mucosa:
Variants of answer:
a) polyposis, dysplasia, metaplasia;
b) dystrophy, hypertrophy;
c) sclerosis, dystrophy, embolism;
d) phlegmon, hypotrophy;
e) hypotrophy, atrophy.

25. Specify the clinical and anatomical forms of appendicitis:
Variants of answer:
a) primary, secondary;
b) true, false;
c) acute, chronic;
d) recurrent;
e) mucinous.

26. Specify the morphological forms of acute appendicitis:
Variants of answer:
a) apostematous;
b) superficial;
c) simple;
d) gangrenous;
e) all answers are correct.

27. Specify the morphological form of destructive appendicitis:
Variants of answer:
a) simple;
b) phlegmonous;
c) superficial;
d) erosive;
e) chronic.

28. Specify the changes characteristic of acute simple appendicitis:
Variants of answer:
a) stasis in capillaries and venules, edema, hemorrhages;
b) focal purulent inflammation in the mucous membrane;
c) ulceration in the mucous membrane;
d) leukocytic infiltrate in all layers of the process wall;
e) putrid inflammation.

29. Specify the condition necessary for the development of secondary gangrenous appendicitis:

Variants of answer:

a) ulceration of the mucous membrane of the process;
b) necrosis of the muscular membrane of the process wall;
c) primary thrombosis of the appendicular artery;
d) secondary thrombosis of the appendicular artery;
e) presence of putrefactive flora in the appendix.

30. Specify the type of appendicitis that develops during the transition of a purulent-destructive process to the mesentery of the process with thrombosis of its artery:

Variants of answer:

a) phlegmonous-ulcerative;
b) primary gangrenous;
c) secondary gangrenous;
d) erosive and ulcerative;
e) infiltrative-ulcerative.

31. Specify the type of appendicitis that develops in primary thrombosis (or thromboembolism) of the appendicular artery:

Variants of answer:

a) thrombotic-hemorrhagic;
b) phlegmonous-ulcerative;
c) destructive;
d) primary gangrenous;
e) secondary gangrenous.

32. Specify the morphological changes in chronic appendicitis:

Variants of answer:

a) ulceration of the mucous membrane of the process;
b) necrosis of the muscular membrane of the process;
c) atrophy of all layers of the process;
d) hypertrophy of the muscular membrane of the process;
e) there is no correct answer.

33. Complications of destructive appendicitis do not include:

Variants of answer:

a) peritonitis;
b) pylephlebitic liver abscesses;
c) self-amputation;
d) perforation;
e) adhesive disease of the abdominal organs.

34. Complications of acute appendicitis do not include:
Variants of answer:
a) empyema;
b) perforation of the process, peritonitis;
c) pylephlebitic abscesses;
d) self-amputation of the process;
e) penetration.

17. LIVER DISEASES

Choose one correct variant of answer

1. Microscopic changes that are found in the liver punctate in acute viral hepatitis include everything, except:
Variants of answer:
a) colliquative necrosis;
b) hydropic dystrophy;
c) balloon dystrophy;
d) Councilman bodies;
e) leukocytic infiltrate.

2. Specify the possible outcomes of acute viral hepatitis:
Variants of answer:
a) recovery;
b) transition to a chronic form;
c) transition to postnecrotic cirrhosis;
d) all answers are correct;
e) all answers are wrong.

3. The main etiological forms of liver cirrhosis include everything except:
Variants of answer:
a) infectious;
b) toxic;
c) biliary;
d) alimentary;
e) mixed.

4. Name the main morphological forms of liver cirrhosis:
Variants of answer:
a) postnecrotic;
b) portal;
c) biliary;

d) all answers are correct;
e) all answers are wrong.

5. Morphological features of liver cirrhosis include all of the following except:

Variants of answer:
a) dystrophy and necrosis;
b) sclerosis and deformation;
c) perverted regeneration;
d) restructuring of the liver;
e) hemochromatosis.

6. Name the macroscopic forms of liver cirrhosis:

Variants of answer:
a) macronodular;
b) micronodular;
c) mixed;
d) all answers are correct;
e) all answers are wrong.

7. Specify the most common etiology of macronodular cirrhosis of the liver:

Variants of answer:
a) virus;
b) alcohol;
c) medicines;
d) small foci of necrosis in toxic dystrophy;
e) ischemic disorders.

8. Specify the most common etiology of micronodular cirrhosis of the liver:

Variants of answer:
a) cholestasis;
b) medicines;
c) alcohol;
d) all answers are correct;
e) all answers are wrong.

9. Specify the characteristic outcome of chronic active hepatitis of any etiology:

Variants of answer:
a) recovery;
b) transition to cancer;
c) development of cirrhosis;
d) development of cholestasis;
e) development of fatty degeneration.

10. Specify the most characteristic types of hepatocyte dystrophy in viral hepatitis:

Variants of answer:

a) fatty;
b) hydropic;
c) lipofuscinosis;
d) hyalinosis;
e) hemosiderosis.

11. Specify the nature and location of infiltrates in the liver lobule during the icteric period of the cyclic form of viral hepatitis:

Variants of answer:

a) leukocytic infiltrate in the portal tracts;
b) lymphocytic and macrophage infiltrate diffusely in the lobule;
c) leukocyte infiltrate diffusely in the lobule;
d) epithelioid cell infiltrate;
e) all answers are wrong.

12. All of the following are macroscopic characteristics of alcoholic cirrhosis of the liver except:

Variants of answer:

a) the surface of the liver is granular;
b) the size of regenerated nodules is less than 1 cm;
c) the surface of the liver is smooth;
d) the liver is reduced in size;
e) color of the liver is yellow-brown.

13. Microscopic characteristics of alcoholic cirrhosis of the liver include all of the following except:

Variants of answer:

a) monolobular structure of nodules;
b) fatty degeneration of hepatocytes;
c) diffuse fibrous septa;
d) leukocytic infiltration;
e) Councilmen bodies in hepatocytes.

14. The possible causes of death in patients with alcoholic cirrhosis of the liver include everything except:

Variants of answer:

a) hepatocellular insufficiency;
b) pulmonary heart failure;
c) bleeding from varicose veins of the esophagus;
d) hepatic and renal insufficiency;
e) Mallory-Weiss syndrome.

15. The morphological characteristics of viral cirrhosis of the liver include all, except:

Variants of answer:

a) the size of the liver is reduced;
b) the surface of the liver is unevenly granular;
c) the cirrhosis is more often multilobular;
d) narrow fields of connective tissue;
e) post-necrotic path of development.

16. Possible causes of death in patients with viral and alcoholic cirrhosis of the liver include all, except:

Variants of answer:

a) liver failure;
b) hepatic and renal insufficiency;
c) pneumonia;
d) bleeding from varicose veins of the esophagus and stomach;
e) cardiac insufficiency.

17. Name the main pathogenetic factor in the development of secondary biliary cirrhosis of the liver:

Variants of answer:

a) venous congestion;
b) cholestasis;
c) lymphostasis;
d) viruses;
e) alcohol.

18. Which disease of the biliary tract could lead to secondary biliary cirrhosis:

Variants of answer:

a) cholelithiasis;
b) liver tumor;
c) phlebitis in the portal vein;
d) stomach ulcer;
e) pneumonia.

19. The main causes of death in patients with secondary biliary cirrhosis include all except:

Variants of answer:

a) asphyxia;
b) liver failure;
c) hepatic and renal insufficiency;
d) encephalopathy;
e) bleeding from varicose veins of the esophagus and stomach.

20. Name the main etiological factors of toxic liver dystrophy:

Variants of answer:

a) infection (viral hepatitis), intoxication;

b) pulmonary hypertension;

c) trauma;

d) radiation damage;

e) heart failure.

21. Specify the outcome of the disease in a protracted course of toxic liver dystrophy:

Variants of answer:

a) organ restoration;

b) cirrhosis of the liver;

c) liver cancer;

d) jaundice;

e) hemosiderosis.

22. Specify the predominant nature of hepatocyte dystrophy in alcoholic hepatitis:

Variants of answer:

a) hemosiderosis;

b) hydropic dystrophy;

c) microvesicular fatty degeneration;

d) lipofuscinosis;

e) hyalinosis.

23. Specify the morphological sign specific for alcoholic hepatitis:

Variants of answer:

a) Councilman bodies;

b) Mallory bodies;

c) foci of necrosis;

d) foci of amyloidosis;

e) granulomas.

24. Specify the possible outcomes of alcoholic hepatitis:

Variants of answer:

a) recovery;

b) death from liver failure;

c) transition to cirrhosis;

d) all answers are correct;

e) all answers are wrong.

25. Specify the main composition of the infiltrate in alcoholic hepatitis:
Variants of answer:
a) plasmacytic;
b) lymphoid;
c) leukocytic;
d) macrophage;
e) epithelioid and giant cells.

26. Specify the pathogenetic types of liver cirrhosis:
Variants of answer:
a) postnecrotic;
b) portal;
c) cardiac;
d) biliary;
e) all answers are correct.

27. Specify the macroscopic types of liver cirrhosis:
Variants of answer:
a) micronodular;
b) macronodular;
c) mixed;
d) all answers are correct;
e) all answers are wrong.

28. Specify the morphological signs of cirrhosis activity:
Variants of answer:
a) foci of sclerosis;
b) penetration of cellular infiltrate into the liver parenchyma, foci of necrosis;
c) plasmorrhagia;
d) centers of congestion;
e) cholestasis.

29. Possible causes of death in patients with viral (postnecrotic) cirrhosis of the liver include all, except:
Variants of answer:
a) pneumonia;
b) asphyxia;
c) liver failure;
d) hepatic and renal insufficiency;
e) bleeding from varicose veins of the esophagus and stomach.

18. KIDNEY DISEASES

Choose one correct variant of answer

1. Specify the morphological substrate of necrotic nephrosis:

Variants of answer:

a) inflammation of the renal glomeruli;

b) necrosis of nephrocytes of the convoluted tubules of the main sections of the nephron;

c) fibrinoid necrosis of the capillaries of the renal glomeruli;

d) necrotizing papillitis;

e) cicatricial wrinkling of the kidneys.

2. Specify the morphological equivalent of acute renal failure:

Variants of answer:

a) paraproteinuric nephrosis;

b) lipoid nephrosis;

c) necrotic nephrosis;

d) primary sclerotic kidney;

e) Alport syndrome.

3. Specify the main pathogenetic mechanism of development of necrotic nephrosis in shock:

Variants of answer:

a) blood shunt through juxtamedullary shunt;

b) increased glomerular filtration rate;

c) increased reabsorption of nephrocytes;

d) lymphostasis in the capillaries of the kidney;

e) renal vein thrombosis.

4. What are the main causes of increased intrarenal pressure in necrotizing nephrosis:

Variants of answer:

a) renal tubular obstruction, progressive interstitium edema;

b) renal artery thrombosis;

c) activation of the juxtaglomerular apparatus;

d) development of kidney infarctions;

e) renal vein thrombosis.

5. Specify the nature of changes in renal circulation in the second stage of necrotizing nephrosis:

Variants of answer:

a) ischemia in the cortical layer, venous plethora in the medulla;

b) venous plethora in the cortical layer, anemia in the medulla;
c) renal blood flow is not changed;
d) anemia in the cortex and medulla;
e) plethora in the cortex and medulla.

6. Specify the main pathogenetic factor causing necrotizing nephrosis:
Variants of answer:
a) inflammation in the renal interstitium;
b) necrosis of the renal glomeruli;
c) inflammation of the capsule of the kidneys;
d) direct action of toxic substances on the tubular epithelium;
e) deposition of amyloid in glomerular mesangium.

7. Specify the main condition necessary for the complete regeneration of necrotic tubular nephrocytes in necrotizing nephrosis:
Variants of answer:
a) preservation of renal glomeruli;
b) appearance of granulation tissue;
c) deposition of calcium oxalate crystals in the stroma;
d) spasm of afferent arterioles;
e) preservation of the tubular basement membrane.

8. Specify the immunopathological mechanisms of glomerulonephritis development:
Variants of answer:
a) cytotoxic and cytolytic;
b) antibody-mediated;
c) immunocomplex-mediated;
d) all answers are correct;
e) all answers are wrong.

9. Name the morphological forms of glomerulonephritis in subacute course:
Variants of answer:
a) mesangiomembranous;
b) extracapillary, proliferative;
c) mesangioproliferative;
d) minimal changes;
e) intracapillary, proliferative.

10. Specify one of the types of glomerulonephritis by etiology:
Variants of answer:
a) shock;
b) toxic;
c) mechanical;

d) bacterial;
e) traumatic.

11. Specify the morphological manifestations of primary nephrotic syndrome:
Variants of answer:
a) nephropathy with minimal changes;
b) focal segmental glomerular sclerosis;
c) membranous nephropathy;
d) all answers are correct;
e) all answers are wrong.

12. Name the morphological type of glomerulonephritis that develops as a result of arterial hypertension:
Variants of answer:
a) extracapillary proliferative;
b) exudative intracapillary;
c) primary wrinkled kidney;
d) membranous nephropathy;
e) arteriolosclerosing glomerulonephritis.

13. Specify the diseases in which amyloidosis of the kidneys can develop:
Variants of answer:
a) trophic ulcers of the lower extremities;
b) bronchiectasis;
c) rheumatoid arthritis;
d) tuberculosis;
e) all answers are correct.

14. Synonyms of rapidly progressive glomerulonephritis do not include:
Variants of answer:
a) extracapillary proliferative;
b) glomerulonephritis with crescents;
c) membranoproliferative glomerulonephritis;
d) malignant;
e) subacute.

15. Specify the main immunopathological mechanism of Goodpasture's syndrome:
Variants of answer:
a) antibody;
b) immunocomplex;
c) cytotoxic and cytolytic;
d) atopic and anaphylactic;
e) granulomatosis.

16. Specify the duration of the course of acute glomerulonephritis:

Variants of answer:

a) up to 6 months;

b) up to 1 year;

c) up to 1.5 years;

d) up to 3 months;

e) up to 3 years old.

17. Specify the cells that predominate in the renal glomerulus in intracapillary proliferative glomerulonephritis:

Variants of answer:

a) podocytes, endothelial cells;

b) podocytes, mesangial cells;

c) endothelial, mesangial cells;

d) nephrothelium, podocytes;

e) podocytes, fibrocytes.

18. Name the cells that take part in the formation of "crescents" in extracapillary productive glomerulonephritis:

Variants of answer:

a) podocytes, nephrothelium;

b) endothelial cells;

c) mesangial cells;

d) mesangiocapillary;

e) nephrocytes of the convoluted tubules of the kidney.

19. The histological characteristics of extracapillary productive glomerulonephritis include all of the following except:

Variants of answer:

a) proliferation of nephrothelium with the formation of "crescents";

b) Kimmelstiel-Wilson nodules;

c) necrosis of capillary loops;

d) protein and fatty degeneration of the epithelium of the convoluted tubules of the kidneys;

e) fibrin thrombi in glomerular capillaries.

20. Specify the most common immunopathological mechanism of chronic glomerulonephritis:

Variants of answer:

a) antibody;

b) immunocomplex;

c) granulomatosis;

d) neutralization and inactivation;

e) extracellular.

21. Specify the reason why the kidneys have a granular surface as a result of chronic glomerulonephritis:

Variants of answer:

a) abscesses in the cortex of the kidneys;
b) deposition of amyloid in the glomeruli of the kidneys;
c) alternating sclerosis and atrophy with areas of hypertrophied nephrons;
d) inflammation of the glomeruli of the kidneys;
e) deposition of calcium salts in areas of necrosis.

22. Name the form of chronic glomerulonephritis, which is characterized by the rapid development of chronic renal failure:

Variants of answer:

a) extracapillary, productive;
b) intracapillary, productive;
c) membranous nephropathy;
d) mesangioproliferative;
e) mesangiocapillary.

23. Localization of immune deposits in glomerulonephritis in the renal glomeruli is found in all of the following, except:

Variants of answer:

a) subendothelial;
b) subepithelial;
c) mesangial;
d) intramembranous;
e) cells of the renal glomerulus.

24. The clinical syndrome of manifestation of lipoid nephrosis is:

Variants of answer:

a) nephrotic syndrome;
b) acute renal failure;
c) chronic renal failure;
d) Cushing's syndrome;
e) Horner's syndrome.

25. The most important clinical syndromes that characterize nephrotic syndrome include all except:

Variants of answer:

a) proteinuria;
b) hematuria;
c) dysproteinemia and hypoproteinemia;
d) hyperlipidemia and hypercholesterolemia;
e) edema.

26. Name a synonym for membranous nephropathy:

Variants of answer:

a) Alport syndrome;

b) adult idiopathic nephrotic syndrome;

c) Ehlers-Danlos syndrome;

d) Kimmelstiel-Wilson syndrome;

e) Patau syndrome.

27. Specify the typical localization of immune complexes in membranous nephropathy:

Variants of answer:

a) intracellular;

b) Bowman capsule;

c) mesangial structures;

d) subepithelial structures;

e) subendothelial structures.

28. Name the immunopathological mechanism of the occurrence of membranous nephropathy:

Variants of answer:

a) immunocomplex;

b) antibody;

c) granulomatosis;

d) inactivation and neutralization;

e) cellular cytolysis.

29. Specify morphological changes in lipoid nephrosis:

Variants of answer:

a) interposition of mesangiocytes;

b) capsular drop;

c) loss of small processes of podocytes;

d) fibrin cap;

e) Kimmelstiel-Wilson's nodules.

30. A distinctive feature of the nephrotic syndrome in lipoid nephrosis is:

Variants of answer:

a) selective proteinuria;

b) Bence-Jones protein;

c) lipoglobinuria;

d) cystinuria;

e) hematuria.

31. Lipoid nephrosis is more common:

Variants of answer:

a) in childhood;
b) at any age;
c) in adolescents;
d) in adulthood;
e) in old age.

32. Name a kidney disease that is accompanied by a lesion of the juxtaglomerular apparatus:

Variants of answer:

a) lipoid nephrosis;
b) focal segmental glomerular hyalinosis;
c) proliferative glomerulonephritis;
d) renal amyloidosis;
e) pyelonephritis.

33. Name the syndrome that develops in the clinic with amyloidosis of the kidneys:

Variants of answer:

a) hepatorenal;
b) Lowe's syndrome;
c) Alport syndrome;
d) nephrotic syndrome;
e) nephritic syndrome.

34. List the histological structures of the kidney in which amyloid deposits can be found in the nephrotic stage of amyloidosis, except:

Variants of answer:

a) in the basement membranes of the glomeruli;
b) in the basement membranes of the tubules;
c) in mesangial cells;
d) in the walls of blood vessels;
e) along the reticular stroma.

35. Name the stain used to determine amyloid in the kidneys:

Variants of answer:

a) toluidine blue;
b) sudan III;
c) hematoxylin and eosin;
d) Picrofuchsin according to Van Gieson;
e) Congo red.

36. Specify the type of inflammation of the mucous membranes of the gastrointestinal tract in uremia:

Variants of answer:

a) fibrinous;
b) purulent;
c) serous;
d) putrefactive;
e) mucous.

37. Specify the types of inflammation of the serous membranes in uremia:

Variants of answer:

a) hemorrhagic;
b) putrefactive;
c) fibrinous;
d) catarrhal;
e) purulent.

38. Indicate the change in the lungs that may occur with uremia:

Variants of answer:

a) pneumonia;
b) vicarious lung hypertrophy;
c) emphysema;
d) atrophy;
e) pneumoconiosis.

39. Specify changes in parenchymal organs in uremia:

Variants of answer:

a) atrophy;
b) protein and fatty degeneration;
c) hypertrophy;
d) regeneration;
e) hyperplasia.

40. Specify brain changes in uremia:

Variants of answer:

a) edema;
b) choreiditis;
c) meningitis;
d) encephalitis;
e) glioblastoma.

19. PATHOLOGY OF THE ENDOCRINE SYSTEM

Choose one correct variant of answer

1. Cerebro-pituitary diseases include:
Variants of answer:
a) Hashimoto disease;
b) Cushing disease;
c) Simmonds disease;
d) Babinski-Fröhlich syndrome;
e) correct answer b, c, d.

2. Addison's disease is characterized by:
Variants of answer:
a) hyperfunction of the adrenal glands;
b) bronze coloration of the skin, hypoglycemia;
c) obesity;
d) arterial hypertension;
e) hyperglycemia.

3. Specify the features of diabetes mellitus in young people:
Variants of answer:
a) leads to obesity;
b) leads to exhaustion;
c) tendency to ketoacidosis;
d) proceeds malignantly;
e) correct answer b, c, d.

4. Riedel thyroiditis is characterized by:
Variants of answer:
a) thyroid gland hypofunction;
b) fibrosis of the gland;
c) atrophy of the parenchyma of the gland;
d) all answers are correct;
e) all answers are wrong.

5. Endocrine organs include:
Variants of answer:
a) thyroid gland;
b) pancreas;
c) pituitary gland;
d) adrenal gland;
e) all answers are correct.

6. Adiposogenital dystrophy is known as:
Variants of answer:
a) Cushing disease;
b) Babinski-Fröhlich syndrome;
c) Hashimoto disease;
d) Simmonds disease;
e) Zollinger-Ellison syndrome.

7. Specify the features of diabetes mellitus in the elderly:
Variants of answer:
a) proceeds benignly, leads to obesity;
b) leads to hypoglycemia;
c) leads to exhaustion;
d) always fatal;
e) prone to ketoacidosis.

8. Specify the changes in the thyroid gland in Hashimoto thyroiditis:
Variants of answer:
a) lymphoid infiltration of the stroma;
b) colloid resorption;
c) sclerosis of the gland;
d) atrophy of the parenchyma;
e) correct answer a, c, d.

9. The development of Graves' disease is facilitated by:
Variants of answer:
a) lack of iodine in the biosphere;
b) psychic trauma;
c) hereditary predisposition;
d) infectious diseases;
e) correct answer b, c, d.

10. In recent years, people with diabetes are more likely to die from the following causes, with the exception of:
Variants of answer:
a) diabetic coma;
b) ischemic cerebral infarction;
c) uremia;
d) myocardial infarction;
e) gangrene of limbs.

11. The disease, with a primary lesion of the thyroid gland, include:
Variants of answer:
a) Cushing disease;

b) Simmonds disease;
c) Hashimoto disease;
d) Addison disease;
e) Babinski-Fröhlich syndrome.

12. Parathyroid osteodystrophy can be caused by:
Variants of answer:
a) adrenal tuberculosis;
b) kidney disease;
c) damage to the colon;
d) adenoma of the parathyroid gland;
e) hypoplasia of the parathyroid gland.

13. The reasons leading to disruption of the activity of the endocrine glands include:
Variants of answer:
a) disorder of the function of the central nervous system;
b) malnutrition;
c) congenital anomaly of the gland;
d) violation of blood circulation in the gland;
e) all of the above are correct.

14. All of the following are common causes of death in diabetic patients except:
Variants of answer:
a) uremia;
b) gangrene;
c) myocardial infarction;
d) allergic shock;
e) sepsis.

15. There are the following types of colloid goiter:
Variants of answer:
a) proliferating;
b) microfollicular;
c) macrofollicular;
d) all answers are correct;
e) all answers are incorrect.

16. Adiposogenital dystrophy is characterized by the presence of:
Variants of answer:
a) progressive cachexia;
b) obesity, underdevelopment of the sex glands;
c) vitiligo;

d) melasma;
e) exophthalmos.

17. The main factor contributing to the development of diabetes is:
Variants of answer:
a) psychic;
b) genetic;
c) infectious;
d) peptic;
e) autoimmune.

18. The cause of Addison disease is often:
Variants of answer:
a) lack of iodine in the environment;
b) tumor of the parathyroid gland;
c) tuberculosis of the adrenal glands;
d) atrophy of the islets of Langerhans;
e) hypoplasia of the gonads.

19. According to the histological structure, the goiter is divided into:
Variants of answer:
a) endemic;
b) sporadic;
c) parenchymal, colloidal;
d) diffuse;
e) there is no correct answer.

20. Cushing disease manifests itself by:
Variants of answer:
a) increased growth of bones in length;
b) upper type of obesity;
c) dwarf growth;
d) bronze coloration of the skin;
e) arterial hypotension.

21. Common causes of Addison disease are:
Variants of answer:
a) atrophy of the islets of Langerhans;
b) aldosteroma;
c) tuberculosis of the adrenal glands;
d) basophilic pituitary adenoma;
e) eosinophilic pituitary adenoma.

22. Simmonds disease manifests itself by:
Variants of answer:
a) decreasing of sexual function;
b) hypertrophy of internal organs;
c) increased sexual function;
d) exophthalmos;
e) gigantism.

23. For fibrous osteodystrophy is not typical:
Variants of answer:
a) hypocalcemia;
b) calcareous metastases;
c) nephrocalcinosis;
d) bone resorption;
e) hyperfunction of the parathyroid glands.

24. The following clinical syndromes are characteristic of Conn's syndrome:
Variants of answer:
a) cardiovascular syndrome;
b) neuromuscular syndrome;
c) hypokalemic nephropathy;
d) all answers are correct;
e) all answers are wrong.

25. Simmonds disease is caused mainly by damage of:
Variants of answer:
a) thyroid gland;
b) pancreas;
c) adrenals;
d) pituitary gland;
e) epiphysis.

26. The following types of goiter are distinguished by etiology:
Variants of answer:
a) inflammatory;
b) sporadic, endemic;
c) traumatic;
d) sclerotic;
e) dystrophic.

27. Addison disease is caused by:
Variants of answer:
a) hyperthyroidism;
b) hypofunction of the thyroid gland;

c) hyperfunction of the adrenal glands;
d) hypofunction of the adrenal glands;
e) hyperfunction of the parathyroid glands.

28. One of the manifestations of Cushing disease is:
Variants of answer:
a) hypoglycemia;
b) hypotension;
c) hypertrichosis;
d) accumulation of fat on the thighs;
e) black acanthosis.

29. All of the following are common causes of death in diabetic patients except:
Variants of answer:
a) uremia;
b) myocardial infarction;
c) brain infarction;
d) gangrene of the extremities;
e) sepsis.

30. The disease caused by the primary lesion of the adrenal glands include:
Variants of answer:
a) Hashimoto disease;
b) Simmonds disease;
c) Graves' disease;
d) Franklin's disease;
e) Conn's syndrome.

20. SEPSIS

Choose one correct variant of answer

1. Specify changes in internal organs in chronic sepsis:
Variants of answer:
a) hyalinosis;
b) hemochromatosis;
c) calcification;
d) hemosiderosis;
e) atrophy.

2. Name the dysproteinosis that complicates the course of chronic sepsis:
Variants of answer:
a) mucoid swelling;
b) fibrinoid swelling;
c) anthracosis;
d) amyloidosis;
e) hyalinosis.

3. Specify changes in blood vessels characteristic of septic endocarditis:
Variants of answer:
a) hemosiderosis;
b) alterative productive vasculitis;
c) hyalinosis;
d) sclerosis;
e) amyloidosis.

4. Specify the localization of the first metastatic foci in septicopyemia:
Variants of answer:
a) lymph nodes;
b) spleen;
c) lungs;
d) myocardium;
e) skin.

5. Specify the most common location of the septic focus in septic endocarditis:
Variants of answer:
a) mitral valve;
b) tricuspid valve;
c) aortic valves;
d) valves of the pulmonary artery;
e) endocardium of the left atrial appendage.

6. Name the change characteristic of a septic focus:
Variants of answer:
a) hyalinosis;
b) purulent inflammation;
c) productive inflammation;
d) fibrinous inflammation;
e) amyloidosis.

7. Specify the change in the kidneys that occurs in septic endocarditis due to thromboembolism:
Variants of answer:
a) glomerulonephritis;

b) amyloidosis;
c) embolic purulent nephritis;
d) pyelonephritis;
e) kidney infarcts.

8. Bone marrow changes in septicemia:
Variants of answer:
a) hypoplasia;
b) aplasia;
c) dysplasia;
d) neoplasia;
e) hyperplasia and myeloid metaplasia.

9. Name the mechanism of occurrence of abscesses of internal organs in septicopyemia:
Variants of answer:
a) thromboembolism;
b) bacterial embolism;
c) tissue embolism;
d) fat embolism;
e) retrograde embolism.

10. Specify the form of sepsis, which is characterized by the development of abscesses:
Variants of answer:
a) septicemia;
b) chroniosepsis;
c) septic endocarditis;
d) cryptogenic sepsis;
e) septicopyemia.

11. Specify changes in the stroma of internal organs in septicemia:
Variants of answer:
a) interstitial inflammation;
b) dystrophy;
c) necrosis;
d) heart attack;
e) hyperplasia.

12. Specify the form of sepsis, which is characterized by the development of embolic purulent nephritis:
Variants of answer:
a) septicopyemia;
b) septic endocarditis;

c) septicemia;
d) chroniosepsis;
e) recurrent warty endocarditis.

13. Specify the type of jaundice that develops in sepsis:
Variants of answer:
a) common;
b) hemolytic;
c) subhepatic;
d) viral;
e) hepatic.

14. Specify changes in parenchymal organs in septicopyemia:
Variants of answer:
a) purulent inflammation, dystrophy;
b) putrid inflammation, catarrhal inflammation;
c) productive inflammation, dystrophy;
d) mixed inflammation, atrophy;
e) hemorrhagic inflammation, amyloidosis.

15. Specify the form of sepsis in which metastatic abscesses occur:
Variants of answer:
a) septicopyemia;
b) septicemia;
c) surgical sepsis;
d) chroniosepsis;
e) septic endocarditis.

16. Specify the change in lymphoid organs in septicemia:
Variants of answer:
a) hypoplasia;
b) hyperplasia;
c) heart attacks;
d) purulent inflammation;
e) hemosiderosis.

17. Name the form of sepsis in which purulent leptomeningitis occurs:
Variants of answer:
a) septicopyemia;
b) tonsillogenic sepsis;
c) uterine sepsis;
d) odontogenic sepsis;
e) septicemia.

18. Specify the nature of general changes in sepsis:
Variants of answer:
a) dystrophy and interstitial inflammation of parenchymal organs;
b) vasculitis;
c) hyperplasia of lymphoid tissue;
d) all answers are correct;
e) all answers are wrong.

19. Name the form of sepsis depending on the entrance gate:
Variants of answer:
a) chroniosepsis;
b) septicemia;
c) odontogenic sepsis;
d) typhoid sepsis;
e) septicopyemia.

20. Specify the changes that occur in the spleen in septicemia:
Variants of answer:
a) myeloid metaplasia, hyperplasia;
b) sclerosis;
c) atrophy;
d) dystrophy;
e) hypoplasia.

21. Give a description of the septic focus in cryptogenic sepsis:
Variants of answer:
a) septic hearth at the entrance gate;
b) septic center away from the entrance gate;
c) there is no septic focus;
d) septic focus – carious teeth;
e) septic focus – uterus.

22. The mechanism of development of jaundice in sepsis:
Variants of answer:
a) hyperbilirubinemia;
b) necrosis of hepatocytes;
c) deficiency of vitamin B12;
d) cholestasis;
e) increased erythrocyte hemolysis.

23. Name the most common causative agent of sepsis at the present time:
Variants of answer:
a) fungi;
b) typhoid bacillus;
c) pneumococcus;

d) anthrax;
e) staphylococcus aureus.

24. Specify one of the components of a septic focus:
Variants of answer:
a) purulent thrombophlebitis;
b) productive vasculitis;
c) hyalinosis of arterioles;
d) fibrinoid necrosis of arterioles;
e) local venous plethora.

25. Specify the possible localization of primary metastatic foci in the presence of a septic focus in the appendix:
Variants of answer:
a) brain;
b) spleen;
c) skin;
d) liver;
e) lungs.

26. Specify the change in the lymph node in the septic focus with septicopyemia:
Variants of answer:
a) hypoplasia;
b) hyperplasia;
c) metaplasia;
d) atrophy;
e) sclerosis.

27. Name the general changes in sepsis:
Variants of answer:
a) general venous plethora;
b) amyloidosis;
c) hyalinosis of vessel walls;
d) sclerosis;
e) hyperplastic processes in hematopoietic and lymphoid tissues.

28. Specify the change that occurs in the skin during sepsis:
Variants of answer:
a) pustules;
b) papules;
c) hemorrhages;
d) vitiligo;
e) leucoderma.

29. What are the differences between sepsis and other infectious diseases:

Variants of answer:

a) polyetiological;
b) there is no flow cyclicity;
c) leaves no immunity;
d) not contagious;
e) all answers are correct.

30. Specify changes in parenchymal organs in septicemia:

Variants of answer:

a) degeneration of the parenchyma, interstitial inflammation;
b) heart attacks;
c) abscesses;
d) amyloidosis;
e) hyalinosis.

31. Name the most common form of neonatal sepsis depending on the entrance gate:

Variants of answer:

a) odontogenic;
b) umbilical;
c) tonsillogenic;
d) staphylococcal;
e) septicemia.

32. Specify the form of sepsis depending on the entrance gate:

Variants of answer:

a) septicopyemia;
b) cryptogenic;
c) pneumococcal;
d) fungal;
e) staphylococcal.

33. Specify the type of sepsis that will develop in a patient with osteomyelitis of the alveolar processes of the lower jaw:

Variants of answer:

a) staphylococcal;
b) streptococcal;
c) odontogenic;
d) tonsillogenic;
e) otogenic.

34. Name the possible outcomes of purulent leptomeningitis in sepsis:

Variants of answer:

a) hydrocephalus, resorption of exudate;

b) hyperplasia;
c) amyloidosis;
d) cardiopulmonary insufficiency;
e) renal-liver failure.

35. The septic focus includes all of the following except:
Variants of answer:
a) hemorrhagic inflammation;
b) focus of purulent inflammation;
c) purulent thrombophlebitis;
d) purulent lymphangitis;
e) lymphadenitis.

36. Possible causative agents of sepsis are listed correctly, with the exception of:
Variants of answer:
a) viruses;
b) fungi;
c) streptococci;
d) staphylococci;
e) mycobacterium tuberculosis.

21. INTESTINAL INFECTIONS

Choose one correct variant of answer

1. Typhoid fever is classified as:
Variants of answer:
a) airborne infection;
b) quarantine infection;
c) anthroponosis;
d) anthropozoonosis;
e) especially dangerous infections.

2. Antibodies to the causative agent of typhoid fever appear in the blood on:
Variants of answer:
a) 1st week;
b) 2nd week;
c) 3rd week;
d) 4th week;
e) 5th week.

3. Specify the change in the mucous membrane of the small intestine in typhoid fever:

Variants of answer:

a) diphtheritic enteritis;
b) phlegmonous enteritis;
c) ulcerative enteritis;
d) catarrhal enteritis;
e) purulent enteritis.

4. Intestinal bleeding, as a complication of typhoid fever, can often develop on:

Variants of answer:

a) 1st week;
b) 2nd week;
c) 3rd week;
d) 4th week;
e) 5th week.

5. Extraintestinal complications of typhoid fever do not include:

Variants of answer:

a) pneumonia;
b) purulent perichondritis of the larynx;
c) amyloidosis;
d) necrosis of the rectus abdominis muscles;
e) osteomyelitis.

6. Salmonellosis is classified as:

Variants of answer:

a) anthropozoonosis;
b) anthroponosis;
c) airborne infections;
d) quarantine infections;
e) parenteral infections.

7. Name the most typical complication of typhoid fever:

Variants of answer:

a) cicatricial stenosis of the intestine;
b) amyloidosis;
c) pyelonephritis;
d) intestinal perforation;
e) cachexia.

8. Specify the type of intestinal inflammation in the second stage of dysentery:

Variants of answer:

a) phlegmonous;
b) ulcerative;
c) croupous;
d) diphtheritic;
e) catarrhal.

9. Name the change in the colon in the third stage of dysentery:

Variants of answer:

a) catarrhal colitis;
b) fibrinous colitis;
c) ulcerative colitis;
d) purulent colitis;
e) serous colitis.

10. Intestinal complications that can occur with dysentery do not include:

Variants of answer:

a) perforation of the intestine;
b) paraproctitis;
c) amyloidosis;
d) intestinal phlegmon;
e) intestinal bleeding.

11. Extraintestinal complications in acute dysentery include all of the following except:

Variants of answer:

a) bronchopneumonia;
b) pyelonephritis;
c) meningitis;
d) liver abscess;
e) arthritis.

12. Give a description of changes in mesenteric lymph nodes in the second stage of typhoid fever:

Variants of answer:

a) lymphoid tissue is displaced;
b) the size of the lymph nodes is increased;
c) possible occurrence of typhoid granulomas;
d) all answers are incorrect;
e) all answers are correct.

13. Name the non-specific complication of cholera:

Variants of answer:

a) anemia;

b) venous plethora;

c) typhoid;

d) sepsis;

e) algid syndrome.

14. The stages of changes in the small intestine in typhoid fever do not include:

Variants of answer:

a) swelling;

b) stage of dirty ulcers;

c) purulent enteritis;

d) stage of necrosis;

e) stage of clean ulcers.

15. Specify the route of infection with typhoid fever:

Variants of answer:

a) fecal-oral;

b) contact;

c) parenteral;

d) airborne;

e) transmissive.

16. Specify the biological environment in which the causative agent of typhoid fever can be detected in the first week of the disease:

Variants of answer:

a) feces;

b) urine;

c) blood;

d) sweat;

e) bile.

17. Give the name of the second stage of cholera:

Variants of answer:

a) gastroenteritis;

b) pyelonephritis;

c) dehydration;

d) anasarca;

e) fibrinous colitis.

18. Specify the changes that are characteristic of the algid period of cholera:

Variants of answer:

a) gastroenteritis, dehydration;

b) colitis;

c) anasarca;

d) ascites;

e) pulmonary edema.

19. Name the morphological change in the small intestine in the algid period of cholera:

Variants of answer:

a) mucosal atrophy;

b) enteritis;

c) mucosal polyps;

d) necrosis of the mucous membrane;

e) mucosal pigmentation.

20. Specify the change in the lymph nodes and spleen in typhoid fever:

Variants of answer:

a) amyloidosis;

b) atrophy;

c) anemia;

d) formation of granulomas;

e) hemosiderosis.

21. Name the causative agent of cholera:

Variants of answer:

a) Salmonella;

b) Shigella;

c) Vibrio El Tor;

d) Vibrio Virchow;

e) Mycobacteria.

22. Specify the route of infection with cholera:

Variants of answer:

a) airborne;

b) parenteral;

c) alimentary;

d) transmissive;

e) contact.

23. List the periods of cholera:

Variants of answer:

a) enteritis;

b) algid;

c) gastroenteritis;

d) all answers are correct;

e) all answers are wrong.

24. Name the section of the intestine in which the main changes in cholera are localized:

Variants of answer:

a) duodenum;

b) ileum;

c) sigmoid colon;

d) transverse colon;

e) rectum.

25. Give the name of the changes in the group follicles of the small intestine in the first stage of typhoid fever:

Variants of answer:

a) ulcers;

b) fibrinous enteritis;

c) swelling;

d) gangrene of the intestine;

e) formation of clean ulcers.

26. Name the type of inflammation in the lymphoid tissue of the intestine in typhoid fever:

Variants of answer:

a) exudative;

b) fibrinous;

c) chronic productive;

d) acute productive;

e) purulent.

27. Name the cells that prevail in the group follicles of the small intestine in the first and second stages of typhoid fever:

Variants of answer:

a) macrophages;

b) lymphocytes;

c) leukocytes;

d) eosinophils;

e) giant cells of foreign bodies.

28. The accumulation of macrophages in the lymphoid tissue of the intestine in typhoid fever is called:

Variants of answer:

a) abscess;
b) heart attack;
c) empyema;
d) granuloma;
e) phlegmon.

29. Non-specific complications of cholera do not include:

Variants of answer:

a) pneumonia;
b) abscesses;
c) erysipelas;
d) amyloidosis;
e) sepsis.

30. Specify the most frequent outcome of healing of dysentery ulcers:

Variants of answer:

a) complete regeneration;
b) substitution;
c) the formation of mild scars;
d) malignancy;
e) epithelial hyperplasia.

31. Specify the changes in the small intestine that are typical for the 3rd week of typhoid fever:

Variants of answer:

a) venous plethora;
b) lymph node swelling;
c) dirty ulcers;
d) gangrene;
e) scarring.

32. The most common complication of typhoid fever is:

Variants of answer:

a) hepatitis;
b) meningitis;
c) intestinal bleeding;
d) otitis;
e) exhaustion.

33. Name the causative agent of dysentery:

Variants of answer:

a) Salmonella;

b) Mycobacterium;
c) Shigella;
d) Cryptococcus;
e) Streptococcus.

34. Specify the path of pathogen penetration into the intestinal wall in case of dysentery:

Variants of answer:
a) interepithelial;
b) transepithelial;
c) intraepithelial;
d) thixotropy;
e) chemotaxis.

35. Specify a possible intestinal complication that may develop in connection with the regeneration of ulcers in dysentery:

Variants of answer:
a) bleeding;
b) perforation;
c) peritonitis;
d) stenosis of the intestinal lumen;
e) diverticulosis.

36. Common changes in dysentery include all of the following except:

Variants of answer:
a) hyperplasia of the spleen;
b) fatty degeneration of the liver;
c) necrosis of the epithelium of the tubules of the kidney;
d) metastatic calcification;
e) fibrosing alveolitis.

37. Specify the change in the large intestine in typhoid fever:

Variants of answer:
a) mucosal atrophy;
b) mucosal edema;
c) purulent colitis;
d) diphtheritic colitis;
e) croupous colitis.

38. Possible changes in the internal organs in typhoid fever include all except:

Variants of answer:
a) infarcts of the spleen;
b) foci of liver necrosis;

c) subacute extracapillary glomerulonephritis;
d) hyperplasia of the spleen;
e) amyloidosis of the spleen.

39. The stages of changes in the intestine in typhoid fever include all except:
Variants of answer:
a) lymph nodes swelling;
b) necrosis;
c) the formation of ulcers;
d) stage of dystrophy;
e) healing.

40. The accumulation of cells in the lymph nodes that are characteristic of typhoid fever are called:
Variants of answer:
a) follicle;
b) abscess;
c) granuloma;
d) sinus histiocytosis;
e) infiltrate.

41. Specify the morphological manifestation of alteration in the lymph nodes in typhoid fever:
Variants of answer:
a) granuloma;
b) abscess;
c) necrosis;
d) amyloidosis;
e) hyalinosis.

42. Specify the nature of inflammation in the small intestine in cholera:
Variants of answer:
a) productive;
b) fibrinous;
c) purulent;
d) catarrhal;
e) hemorrhagic.

43. Give the name of the fourth stage of group follicle changes in typhoid fever:
Variants of answer:
a) dirty ulcers;
b) clean ulcers;
c) lymph nodes swelling;

d) ulceration;
e) scarring.

44. Quarantine infections include all of the following except:
Variants of answer:
a) Smallpox;
b) Ebola;
c) Plague;
d) Yellow fever;
e) Malaria.

45. Specify the duration of the incubation period for cholera:
Variants of answer:
a) a few minutes;
b) 3–5 days;
c) 1–2 months;
d) 1–4 weeks;
e) 1–2 weeks.

46. Specify the main reason for the development of cholera coma:
Variants of answer:
a) hypoproteinemia;
b) progressive exsicosis;
c) hyperlipidemia;
d) oliguria;
e) hyperproteinemia.

47. Specify the features of rigor mortis in cholera:
Variants of answer:
a) expressed significantly;
b) long lasting;
c) develops rapidly;
d) all answers are correct;
e) all answers are wrong.

48. Microscopic changes in the kidneys in post-cholera uremia:
Variants of answer:
a) subacute extracapillary glomerulonephritis;
b) mesangioproliferative glomerulonephritis;
c) amyloidosis;
d) infarct-like necrosis of the cortex;
e) acute pyelonephritis.

49. Specify the duration of the incubation period for typhoid fever:
Variants of answer:
a) 1–3 months;
b) 2–6 weeks;
c) 10–14 days;
d) 1–2 days;
e) 1–5 hours.

50. The causes of death of patients with typhoid fever do not include:
Variants of answer:
a) intestinal bleeding;
b) peritonitis;
c) pneumonia;
d) sepsis;
e) amyloidosis.

22. VIRAL INFECTIONS

Choose one correct variant of answer

1. A feature of the interaction of the virus and the body are:
Variants of answer:
a) species specificity of the virus;
b) reactivity of the organism;
c) hyperreactivity of the organism;
d) hyperactivity of the organism;
e) formation of immunity.

2. The ability of a virus to infect certain cells and tissues is called:
Variants of answer:
a) virulence;
b) tropism;
c) pathogenicity;
d) invasiveness;
e) phagocytosis.

3. Virus tropism is due to:
Variants of answer:
a) lipoproteins;
b) perverted exchange in the cell;
c) cell necrosis;
d) features of cell and virus receptors;
e) viral enzymes.

4. The mechanisms of damage to cells of a macroorganism by a virus do not include:

Variants of answer:

a) violation of the synthesis of normal proteins;
b) toxic effect of viral proteins;
c) stimulation of the phagocytosis reaction;
d) autoimmunization;
e) destruction of the cell as a result of the accumulation of viral particles.

5. Specify the source of influenza infection:

Variants of answer:

a) virus carrier;
b) dogs;
c) birds;
d) sick person;
e) pig.

6. Name the route of transmission of influenza infection:

Variants of answer:

a) fecal-oral;
b) airborne;
c) contact;
d) lymphogenic;
e) hematogenous.

7. The morphological manifestations of the vasopathic action of the virus include all of the following except:

Variants of answer:

a) fullness;
b) fibrinoid necrosis;
c) stasis;
d) plasmorrhagia;
e) hemorrhage.

8. Inhibition of the body's defense systems is manifested by all of the following, except:

Variants of answer:

a) suppression of phagocytosis of neutrophils;
b) suppression of chemotaxis of macrophages;
c) activation of phagocytosis of macrophages;
d) development of autoimmunization;
e) appearance of toxic immune complexes.

9. The immunosuppressive effect of the influenza virus is dangerous as a result of:

Variants of answer:

a) hyperplasia of the spleen;
b) dystrophic changes in organs;
c) accession of a secondary infection;
d) autoimmunization;
e) dyscirculatory disorders.

10. Local changes in the anatomical regions of the respiratory system with influenza include all of the following, except:

Variants of answer:

a) rhinitis;
b) pharyngitis;
c) tracheitis;
d) bronchitis;
e) intermediate inflammation.

11. Morphological manifestation of lesions of the mucous membrane of the upper respiratory tract in mild influenza:

Variants of answer:

a) purulent tracheitis;
b) serous-hemorrhagic tracheitis;
c) catarrhal laryngo-tracheobronchitis;
d) mucopurulent bronchitis;
e) hemorrhagic laryngitis.

12. Microscopic changes in the mucous membrane of the upper respiratory tract with a mild form of influenza are characterized by all of the following, except:

Variants of answer:

a) ischemia;
b) lymphoid cell infiltration;
c) dystrophy and desquamation of epithelial cells;
d) fuchsinophilic inclusions in the cytoplasm of epithelial cells;
e) hypersecretion of mucosal glands.

13. Type of dystrophy of epithelial cells in influenza:

Variants of answer:

a) mucoid swelling;
b) cloudy swelling;
c) fatty;
d) horny;
e) hydropic.

14. Specify the outcome of changes in the mucous membrane of the upper respiratory tract in mild influenza:

Variants of answer:

a) formation of deep ulcers;

b) scar formation;

c) complete regeneration of the mucous membrane;

d) chronic bronchitis;

e) catarrhal tracheitis.

15. List the possible causes of death of patients with influenza with general intoxication of the body:

Variants of answer:

a) asphyxia;

b) toxic hemorrhagic pulmonary edema, hemorrhages in the vital centers of the brain;

c) myocardial infarction;

d) kidney failure;

e) uremia.

16. List the characteristic changes in the larynx and trachea in severe influenza:

Variants of answer:

a) catarrh;

b) serous inflammation;

c) croupous inflammation;

d) fibrinous-hemorrhagic inflammation, necrosis of the mucous membrane;

e) putrid inflammation.

17. Specify the characteristic changes in the bronchi in severe influenza:

Variants of answer:

a) endobronchitis;

b) mesobronchitis;

c) destructive panbronchitis;

d) chronic bronchitis;

e) polyposis bronchitis.

18. The characteristic appearance of the lung in influenza is due to all of the following except:

Variants of answer:

a) inflammation;

b) hemorrhages;

c) foci of atelectasis;

d) pneumosclerosis;

e) areas of necrosis and abscess formation.

19. Brain changes in severe influenza include all of the following except:
Variants of answer:
a) serous meningitis;
b) acute swelling of the brain;
c) hydrocephalus;
d) hemorrhages;
e) dystrophic changes in neurons.

20. Specify the route of transmission of the measles pathogen:
Variants of answer:
a) fecal-oral;
b) parenteral;
c) airborne;
d) lymphogenic;
e) neurogenic.

21. The measles virus does not infect:
Variants of answer:
a) epithelium of the pharynx;
b) epithelium of the trachea;
c) bronchial epithelium;
d) myocardium;
e) conjunctiva.

22. Name the characteristic changes in the bronchial epithelium in measles:
Variants of answer:
a) desquamation;
b) necrosis;
c) metaplasia;
d) dysplasia;
e) atrophy.

23. Specify the possible cause of death, which is due to damage to the larynx in measles:
Variants of answer:
a) false croup and asphyxia;
b) pulmonary edema;
c) true croup and asphyxia;
d) acute pulmonary insufficiency;
e) acute cardiovascular failure.

24. Name the changes that underlie false croup:
Variants of answer:
a) hyperemia of the mucous membrane;

b) reflex bronchospasm;
c) pulmocoronary reflex;
d) spasm of the muscles of the larynx;
e) fibrinous-hemorrhagic tracheitis.

25. A change in the mucous membrane of the cheek with measles is called:
Variants of answer:
a) exanthema;
b) petechiae;
c) enantheme;
d) hemorrhages;
e) metaplasia.

26. The change in the skin in measles is called:
Variants of answer:
a) enantheme;
b) exanthema;
c) papule;
d) pustule;
e) petechiae.

27. Specify the cause of enanthema and exanthema in measles:
Variants of answer:
a) bacteremia;
b) pyemia;
c) uremia;
d) embolism;
e) viremia.

28. Measles is called complicated when:
Variants of answer:
a) exanthema;
b) enanthems;
c) acute bronchitis;
d) catarrhal bronchitis;
e) focal pneumonia.

29. Specify the route of infection with poliomyelitis:
Variants of answer:
a) fecal-oral;
b) airborne;
c) sexual;
d) contact;
e) parenteral.

30. The polio virus infects:

Variants of answer:

a) intestinal epithelium;

b) lymphoid tissue;

c) bronchial epithelium;

d) neurons of the anterior horns of the spinal cord;

e) soft meninges.

31. Specify the route of penetration of the poliomyelitis virus into the central nervous system:

Variants of answer:

a) lymphogenic;

b) transplacental;

c) hematogenous;

d) perineural;

e) contact.

32. The stages of the course of poliomyelitis do not include:

Variants of answer:

a) preparative;

b) paralytic;

c) recovery;

d) residual changes;

e) sharp.

33. The microscopic characteristics of the spinal cord in the paralytic stage of poliomyelitis are characterized correctly, with the exception of:

Variants of answer:

a) necrosis of neurons of the anterior horns;

b) necrosis of neurons of the posterior horns;

c) leukocyte infiltration;

d) proliferation of neuroglia;

e) vascular disorders.

34. Localization of changes in poliomyelitis outside the spinal cord is listed correctly, with the exception of:

Variants of answer:

a) in the medulla oblongata;

b) in the bridge;

c) in paraventricular nuclei;

d) in neurons of the anterior central gyrus;

e) in the epiphysis.

35. Name the change in the heart in poliomyelitis:
Variants of answer:
a) pericarditis;
b) dystrophy of cardiomyocytes;
c) endocarditis;
d) pancarditis;
e) diffuse cardiosclerosis.

36. Name the change in the striated muscles in poliomyelitis:
Variants of answer:
a) hypertrophy;
b) aplasia;
c) hypotrophy;
d) neurotrophic atrophy;
e) amyloidosis.

37. Specify the source of epidemic typhus:
Variants of answer:
a) cats and dogs;
b) cattle;
c) rats;
d) mouse;
e) sick person.

38. Name the mechanism of infection with epidemic typhus:
Variants of answer:
a) parenteral;
b) hit of the pathogen from the feces of the louse when scratching the skin;
c) fecal-oral;
d) transplacental;
e) transmissive.

39. In epidemic typhus, the following are not affected:
Variants of answer:
a) skin;
b) brain;
c) heart;
d) sympathetic nervous system;
e) kidneys and liver.

40. Damage to organs and tissues in epidemic typhus is due to:
Variants of answer:
a) dystrophic changes;
b) thrombosis;
c) violation of blood clotting;

d) increased vascular permeability;
e) typhoid vasculitis.

41. Vascular changes in typhoid vasculitis are listed correctly, except for:
Variants of answer:
a) swelling of the endothelium;
b) foci of necrosis;
c) desquamation of adventitia;
d) formation of blood clots;
e) proliferation of vascular wall cells.

42. Specify the change in the brain in epidemic typhus:
Variants of answer:
a) hydrocephalus;
b) meningoencephalitis;
c) demyelination;
d) meningitis;
e) calcification.

43. The macroscopic characteristics of the brain in epidemic typhus are described correctly, with the exception of:
Variants of answer:
a) fullness;
b) multiple hemorrhages;
c) edema;
d) the meninges are swollen;
e) atrophy of the cerebral cortex.

44. The cellular composition of typhoid granulomas in the brain does not include:
Variants of answer:
a) endothelium;
b) pericytes;
c) adventitial cells;
d) microglia;
e) neutrophils.

45. Specify the changes that are not observed in the brain with typhus:
Variants of answer:
a) hyperemia;
b) centers of calcification;
c) stasis;
d) perivascular plasma cell proliferation;
e) proliferation of microglia.

46. Microscopic manifestation of typhoid granuloma in the skin:
Variants of answer:
a) enantheme;
b) papule;
c) exanthema;
d) pustule;
e) necrosis.

47. Symptoms of typhus include all of the following except:
Variants of answer:
a) trophic disorders in the skin;
b) mumps and otitis;
c) metastatic calcification;
d) pneumonia;
e) oleogranulomas.

48. Name the common cause of death in patients with typhus:
Variants of answer:
a) chronic pulmonary heart failure;
b) asphyxia;
c) hemorrhage in the pancreas;
d) acute heart failure;
e) pulmonary edema.

49. Specify the source of HIV infection:
Variants of answer:
a) human carrier of the virus;
b) rats;
c) monkeys;
d) mosquitoes;
e) pets.

50. Clinical variants of the course of HIV infection do not include:
Variants of answer:
a) acute viral lymphotropic infection;
b) abortive;
c) lymphadenopathy syndrome;
d) pre-AIDS;
e) AIDS.

51. The main clinical manifestations of HIV infection do not include:
Variants of answer:
a) vasculitis;
b) lymphadenopathy;

c) fever;
d) weight loss;
e) diarrhea.

52. Name the most common cause of death in HIV-infected patients:
Variants of answer:
a) hemorrhage in the brain;
b) acute heart failure;
c) opportunistic infections;
d) uremia;
e) fever.

53. Specify the reason for the development of opportunistic infections in HIV infection:
Variants of answer:
a) fever;
b) weight loss;
c) lymphadenopathy;
d) damage to the central nervous system;
e) secondary immunodeficiency.

54. The manifestations of opportunistic infections in HIV infection are listed correctly, except for:
Variants of answer:
a) Pneumocystis pneumonia;
b) Candidiasis;
c) Cytomegalovirus infection;
d) Toxoplasma encephalitis;
e) Ascariasis.

55. Specify a characteristic change in lymphoid tissue in HIV infection:
Variants of answer:
a) atrophy of lymphoid tissue;
b) dystrophic changes;
c) hypoplasia;
d) aplasia;
e) metaplasia.

23. PEDIATRIC INFECTIONS

Choose one correct variant of answer

1. In the pathogenesis of diphtheria, the main importance is:
Variants of answer:
a) isolation of endotoxin;
b) release of exotoxin;
c) isolation of exo- and endotoxin;
d) intraepithelial reproduction of the pathogen;
e) serological variant of streptococcus.

2. True croup is:
Variants of answer:
a) diphtheritic inflammation of the tonsils and pharynx;
b) diphtheritic inflammation of the larynx;
c) lobar inflammation of the larynx;
d) croupous inflammation of the bronchial tree;
e) croupous inflammation of the pharynx and tonsils.

3. In the mucous membrane of the upper respiratory tract with measles, there may be:
Variants of answer:
a) catarrh;
b) diphtheritic inflammation;
c) pityriasis peeling;
d) putrefactive inflammation;
e) ichthyosis.

4. Scarlet fever is called extrabuccal if the primary affect is not localized in:
Variants of answer:
a) pharynx;
b) conjunctiva;
c) skin;
d) genital tract;
e) lungs.

5. Local changes in measles do not occur:
Variants of answer:
a) on the skin;
b) in the pharynx;
c) in the trachea;
d) in the bronchi;
e) in the conjunctiva.

6. The severe septic form of scarlet fever is characterized by:
Variants of answer:
a) purulent-necrotic changes in the soft tissues of the neck;
b) myeloid metaplasia of lymphoreticular tissue;
c) purulent-necrotic tonsillitis;
d) all answers are correct;
e) all answers are wrong.

7. Way of infection with scarlet fever:
Variants of answer:
a) airborne;
b) through intact skin;
c) with blood transfusion and sera;
d) through damaged skin;
e) transmissive.

8. Specify clinical and morphological forms of scarlet fever:
Variants of answer:
a) toxic;
b) septic;
c) toxic-septic;
d) all answers are correct;
e) all answers are wrong.

9. Diphtheria is transmitted:
Variants of answer:
a) through damaged skin;
b) alimentary way;
c) with blood transfusion and sera;
d) transmissively;
e) airborne way.

10. In severe septic form of scarlet fever, there may be:
Variants of answer:
a) retropharyngeal abscess;
b) brain abscess;
c) otitis;
d) neck phlegmon;
e) all answers are correct.

11. In the kidneys with diphtheria can be observed:
Variants of answer:
a) pyelonephritis;
b) glomerupopathy;

c) necrotic nephrosis;
d) glomerulonephritis;
e) pyonephrosis.

12. Typical for meningococcal meningitis:
Variants of answer:
a) catarrh;
b) hemorrhagic inflammation;
c) purulent inflammation;
d) putrefactive inflammation;
e) productive inflammation.

13. Specify the localization of enanthems in measles:
Variants of answer:
a) on the entire surface of the body, with the exception of the nasolabial triangle;
b) on the lips;
c) in the nose;
d) on the mucous membrane of the cheeks;
e) on the skin of the face.

14. The descending croup is:
Variants of answer:
a) croupous inflammation of the pharynx;
b) croupous inflammation of the tonsils;
c) croupous inflammation of the larynx;
d) croupous inflammation of the bronchi;
e) croupous inflammation of the pharynx.

15. The causative agent of measles is:
Variants of answer:
a) RNA-containing virus variants A, B, C;
b) RS virus;
c) DNA-containing virus;
d) RNA-containing virus related to myxoviruses;
e) RNA-containing virus related to paramyxoviruses.

24. TUBERCULOSIS

Choose one correct variant of answer

1. List the ways of tuberculosis mycobacteria entering the human body:

Variants of answer:

a) aerogenic;
b) alimentary;
c) sexual;
d) transplacental;
e) correct answer a, b.

2. Give the definition of "latent infection":

Variants of answer:

a) carrier of the infection with the development of a specific tissue reaction;
b) carrier of the infection;
c) entry of the infection into tissues without the development of a specific inflammatory reaction;
d) body's reaction to mycobacteria;
e) incomplete phagocytosis.

3. Primary tuberculosis develops against the background of the following change in the reactivity of the body:

Variants of answer:

a) persistent immunity;
b) relative immunity;
c) sensitization of the body;
d) autoimmunization of the body;
e) immunological tolerance.

4. Name the changes that reflect the state of sensitization of the body to the causative agent of tuberculosis:

Variants of answer:

a) sclerosis;
b) proliferation of tissue and hematogenous elements;
c) exudative inflammation and necrosis;
d) necrosis and petrification;
e) granuloma.

5. Name the tissue reactions that occur during the progression of primary tuberculosis:

Variants of answer:

a) proliferation and sclerosis;
b) alteration and exudation;

c) petrification and encapsulation;
d) infiltrative-productive tissue reaction;
e) organization.

6. Primary tuberculosis develops as a result of:
Variants of answer:
a) the first contact of the human body with the mycobacterium;
b) repeated contact of the human body with the mycobacterium;
c) repeated entry of tuberculosis mycobacteria into the human body;
d) activation of the infection in hematogenous foci of elimination;
e) no correct answer.

7. Primary tuberculosis is currently predominantly found in:
Variants of answer:
a) early childhood;
b) school age;
c) adolescence;
d) all answers are correct;
e) no answer is correct.

8. Indicate the morphological expression of primary tuberculosis:
Variants of answer:
a) caseous pneumonia;
b) primary tuberculosis complex;
c) primary affect;
d) miliary tuberculosis;
e) tuberculous lymphadenitis.

9. List the components of the primary pulmonary tuberculosis complex:
Variants of answer:
a) focus of bronchopneumonia and regional lymphadenitis;
b) focus of caseous pneumonia, lymphangitis, regional lymphadenitis;
c) purulent phlebitis;
d) focus of hemorrhagic pneumonia;
e) thromboarteritis.

10. Specify the typical localization of the primary tuberculosis complex in the organs:
Variants of answer:
a) liver and kidneys;
b) heart and joints;
c) bones and muscles;
d) intestines and lungs;
e) brain and spinal cord.

11. Specify the most typical localization of the primary tuberculosis pulmonary lesion:

Variants of answer:

a) 6–10 segments;

b) 3, 8, 9, 10 segments below the pleura;

c) 1–3 segments;

d) 4–5 segments;

e) 3–6 segments.

12. Name the clinical and morphological form of tuberculosis:

Variants of answer:

a) with hematogenous progression;

b) primary tuberculosis;

c) Ghon focus;

d) Abrikosov's focus;

e) with lymph node progression.

13. The primary lung lesion, depending on the affected area, is called:

Variants of answer:

a) caseous alveolitis;

b) caseous lobular pneumonia;

c) caseous lobar pneumonia;

d) all answers are correct;

e) all answers are incorrect.

14. Name the pleural change that occurs in the area of the primary tuberculosis lesion:

Variants of answer:

a) dystrophic changes;

b) atrophic changes;

c) develops fibrinous-serous pleurisy;

d) develops purulent pleurisy;

e) develops petrification.

15. The pathway to the root of the lung in primary tuberculosis of the lungs is represented by:

Variants of answer:

a) primary tuberculosis component;

b) primary lesion;

c) lymphangitis;

d) lymphadenitis;

e) pleurisy.

16. Specify the typical tissue reactions in the primary tuberculosis lesion:

Variants of answer:

a) necrotic (caseous pneumonia);

b) exudative (perifocal);

c) productive with intermediate tissue damage;

d) exudative with purulent exudate;

e) correct answers are a, b.

17. Name the typical tissue reaction in the lung lymph nodes in tuberculosis lymphadenitis:

Variants of answer:

a) fibrinoid necrosis;

b) purulent inflammation;

c) caseous necrosis and granuloma formation;

d) hemorrhagic inflammation;

e) dystrophic changes.

18. List the organs affected by primary tuberculosis in the case of alimentary infection:

Variants of answer:

a) tonsils;

b) small intestine;

c) stomach;

d) rectum;

e) correct answers are a, b, c.

19. Morphological characteristics of the primary tuberculosis lesion in case of alimentary infection:

Variants of answer:

a) fibrinous sigmoiditis;

b) polyps of the sigmoid colon;

c) enterocolitis;

d) erosive enteritis;

e) ulcers in the small and large intestines.

20. Specify the site of localization of the primary tuberculosis lesion in the intestines:

Variants of answer:

a) in the area of group follicles of the small and large intestines;

b) in the mucous membrane of the sigmoid colon;

c) in the mucous membrane of the rectum;

d) in the area of the antral part of the stomach;

e) in the esophagus.

21. Name the variants of the course of primary tuberculosis complex:
Variants of answer:
a) healing or progression;
b) involvement of the reproductive system;
c) bronchogenic spread of infection;
d) chronic;
e) correct answer a, d.

22. Name the forms of progression of primary tuberculosis:
Variants of answer:
a) bronchogenic;
b) hematogenous;
c) lymphogenous;
d) perineural;
e) correct answer b, c.

23. List the processes that lead to healing of primary lung lesion:
Variants of answer:
a) growth of the lesion with melting of necrotic masses;
b) petrification and encapsulation;
c) peri-focal serous inflammation;
d) hematogenous progression;
e) pulmonary emphysema.

24. Name the clinical-morphological form of tuberculosis with involvement of lymph nodes:
Variants of answer: a) primary;
b) hematogenous;
c) secondary;
d) osteoarticular;
e) urogenital.

25. The macroscopic characteristic of the primary tuberculosis lesion in the lung is:
Variants of answer:
a) abscess pneumonia;
b) caseous necrosis pneumonia;
c) purulent lymphangitis;
d) purulent thrombophlebitis;
e) purulent lymphadenitis.

26. Name the lung segments where Ghon's focus is most commonly localized:
Variants of answer:
a) segments 1, 3;

b) segments 3, 8, 9, 10;
c) segments 5, 6;
d) segments 9, 10;
e) segment 5.

27. Reinfection tuberculosis complex occurs when:
Variants of answer:
a) activation of infection from hematogenous foci of seeding;
b) activation of infection from Ghon's foci;
c) activation of infection from Simon's foci;
d) biological cure of primary tuberculosis in the elderly;
e) no correct answer.

28. Name the form of hematogenous dissemination of primary tuberculosis:
Variants of answer:
a) cavernous;
b) focal;
c) miliary;
d) disseminated;
e) no correct answer.

29. Name the organs where seeding lesions most commonly develop in hematogenous dissemination of primary tuberculosis:
Variants of answer:
a) meninges;
b) lower lung lobes;
c) lung segments 1-2;
d) bones;
e) correct answer a, b, c.

30. Name the forms of progression of primary tuberculosis:
Variants of answer:
a) bronchogenic;
b) hematogenous;
c) lymphadenopathic;
d) perineural;
e) correct answer b, c.

31. List the processes that lead to healing of primary pulmonary lesion:
Variants of answer:
a) growth of lesion with liquefaction of necrotic masses;
b) petrification and encapsulation;
c) perifocal serous inflammation;
d) hematogenous progression;
e) pulmonary emphysema.

32. Name the clinical-morphological form of tuberculosis with lymph node involvement:

Variants of answer:

a) primary;
b) hematogenous;
c) secondary;
d) osteoarticular;
e) urogenital.

33. What is the macroscopic characteristic of primary tuberculous lesion in the lung?

Variants of answer:

a) abscess formation;
b) caseous pneumonia;
c) suppurative lymphangitis;
d) suppurative thrombophlebitis;
e) suppurative lymphadenitis.

34. Identify the lung segments where Ghon's focus is most commonly localized:

Variants of answer:

a) segments 1 and 3;
b) segments 3, 8, 9, and 10;
c) segments 5 and 6;
d) segments 9 and 10;
e) segment 5.

35. Reinfection tuberculous complex occurs:

Variants of answer:

a) when the infection is activated from hematogenous foci of seeding;
b) when the infection is activated from Ghon's foci;
c) when the infection is activated from Simon's foci;
d) in elderly people during biological healing of primary tuberculosis;
e) no correct answer.

36. Name the form of hematogenous dissemination of primary tuberculosis:

Variants of answer:

a) cavernous;
b) focal;
c) miliary;
d) disseminated;
e) no correct answer.

37. Name the organs where foci of seeding are most commonly developed in hematogenous dissemination of primary tuberculosis:

Variants of answer:

a) meninges;
b) lower lobe of the lung;
c) segments 1 and 2 of the lung;
d) bones;
e) correct answers a, b, d.

38. Morphological characteristic of paraspecific reactions in tuberculosis:

Variants of answer:

a) nonspecific immune inflammation in internal organs;
b) hyperplastic changes in hematopoietic tissue;
c) fibrinoid changes in connective tissue;
d) all answers are correct;
e) all answers are incorrect.

39. Name the change in the body's immune reactivity, against which hematogenous tuberculosis develops:

Variants of answer:

a) relative immunity;
b) lack of immunity;
c) autoimmunization;
d) immune deficiency;
e) immunological tolerance.

40. Name the forms of hematogenous tuberculosis:

Variants of answer:

a) generalized;
b) with extrapulmonary lesions;
c) pulmonary;
d) infiltrative;
e) correct answers a, b, c.

41. Name the tissue reaction characteristic of hematogenous tuberculosis:

Variants of answer:

a) necrotic;
b) productive;
c) exudative;
d) exudative-necrotic;
e) exudative-productive.

42. Morphological manifestation of productive tissue reaction in tuberculosis:

Variants of answer:

a) caseous necrosis;
b) focal bronchopneumonia;
c) granuloma;
d) tuberculoma;
e) hemorrhage.

43. Name the feature of acute tuberculosis sepsis:

Variants of answer:

a) develops in primary tuberculosis;
b) develops in secondary tuberculosis;
c) necrotic foci in internal organs;
d) tuberculous granulomas appear in all organs;
e) a type of hematogenous disseminated tuberculosis.

44. The most common morphological manifestation of tuberculous nodule in miliary tuberculosis:

Variants of answer:

a) focal exudative inflammation;
b) focal caseous necrosis;
c) petrification;
d) granuloma;
e) scar.

45. Name the type of tuberculosis with predominant extrapulmonary involvement:

Variants of answer:

a) focal;
b) hematogenous progression;
c) lymph node progression;
d) large focal;
e) hematogenous disseminated.

46. Name the clinical-anatomical form of tuberculosis in which tuberculous spondylitis develops:

Variants of answer:

a) miliary;
b) hematogenous disseminated;
c) primary;
d) hematogenous;
e) secondary.

47. Name the form of bone and joint tuberculosis:

Variants of answer:

a) secondary;

b) primary;

c) hematogenous disseminated;

d) cavernous;

e) destructive.

48. List the organs and organ systems in which changes are most commonly localized in hematogenous tuberculosis with extrapulmonary lesions:

Variants of answer:

a) heart and brain;

b) skeletal and urogenital systems;

c) hematopoietic system;

d) spleen and adrenal glands;

e) bone marrow and liver.

49. Name the form of hematogenous tuberculosis with necrotic tissue reaction:

Variants of answer:

a) miliary tuberculosis;

b) acute tuberculous sepsis;

c) hematogenously disseminated tuberculosis;

d) skeletal tuberculosis;

e) tuberculosis of the kidneys.

50. Name the type of tissue reaction in general miliary tuberculosis:

Variants of answer:

a) exudative;

b) necrotic;

c) exudative-necrotic;

d) productive with intermediate inflammation in organs;

e) productive with development of tuberculous granulomas.

51. Name the clinicomorphological form of tuberculosis in which miliary tuberculosis of the lungs develops:

Variants of answer:

a) primary;

b) hematogenous;

c) secondary;

d) acute;

e) chronic.

52. Specify the preferred site of lesions in skeletal tuberculosis:

Variants of answer:

a) bones of the skull;

b) diaphysis of long bones;

c) epiphyses of bones forming the knee and hip joints, vertebral bodies;

d) lower jaw;

e) bones of the foot.

53. Specify the predominant route of infection spread in secondary tuberculosis:

Variants of answer:

a) lymphatic;

b) hematogenous;

c) intracanalicular;

d) implantation;

e) perineural.

54. Name the form of secondary tuberculosis:

Variants of answer:

a) generalized;

b) hematogenously disseminated;

c) tuberculoma;

d) lymph node progression;

e) acute miliary.

55. Name the form of tuberculosis that develops during the progression of infiltrative tuberculosis:

Variants of answer:

a) Abrikosov's focus;

b) caseous pneumonia;

c) chronic destructive tuberculosis;

d) fibrous-focal tuberculosis;

e) fibrous-cavernous tuberculosis.

56. Name the theory of the origin of secondary tuberculosis:

Variants of answer:

a) viral;

b) physico-chemical;

c) endogenous;

d) polyetiological;

e) toxic.

57. Name the extrapulmonary complication of cirrhotic tuberculosis:
Variants of answer:
a) sepsis;
b) amyloidosis;
c) brown induration of the lungs;
d) meningitis;
e) fistulas.

58. Give a description of a tuberculoma:
Variants of answer:
a) tumor;
b) a type of hematogenous tuberculosis;
c) phase of evolution of infiltrative tuberculosis;
d) variant of the course of primary tuberculosis;
e) initial form of secondary tuberculosis.

59. Name the form-phase of secondary tuberculosis:
Variants of answer:
a) hematogenously disseminated;
b) with extrapulmonary lesions;
c) Ghon focus;
d) infiltrative;
e) with hematogenous progression.

60. Specify the cellular composition of the tuberculosis granuloma:
Variants of answer:
a) lymphocytes, Berezovsky-Sternberg cells;
b) epithelioid cells, lymphocytes;
c) polymorphonuclear leukocytes, plasma cells;
d) macrophages, giant cells of foreign bodies;
e) erythrocytes, macrophages.

61. Specify a possible route of dissemination of secondary tuberculosis into the terminal stage:
Variants of answer:
a) hematogenous;
b) fecal-oral;
c) transmissive;
d) lymphogenous;
e) intracanalicular.

62. Name the form of secondary tuberculosis in which productive tissue reaction predominates:
Variants of answer:
a) tuberculoma;

b) caseous pneumonia;
c) Abrikosov's focus;
d) cirrhotic tuberculosis;
e) acute cavernous tuberculosis.

63. Specify the localization of fresh foci of secondary tuberculosis in the lungs:

Variants of answer:
a) 3–4 segments;
b) 5–6 segments;
c) 8–9 segments;
d) 7–10 segments;
e) 1–2 segments.

64. Specify the change in the bifurcation pulmonary lymph nodes in secondary tuberculosis:

Variants of answer:
a) caseous necrosis;
b) granulomatosis;
c) petrification;
d) crystallization;
e) amyloidosis.

65. Name the form of secondary tuberculosis that acute cavernous tuberculosis can progress to:

Variants of answer:
a) fibrocavernous;
b) generalized;
c) cirrhotic;
d) fibrofocal;
e) Ghon focus.

66. Specify one of the most common causes of death in patients with fibrocavernous tuberculosis:

Variants of answer:
a) cardiogenic shock;
b) sepsis;
c) cardiopulmonary failure;
d) cerebral edema;
e) liver failure.

67. Fibrofocal tuberculosis is a variant of the course of:

Variants of answer:
a) primary tuberculosis;

b) hematogenous generalized tuberculosis;
c) lymphogenous tuberculosis;
d) hematogenous tuberculosis with lung involvement;
e) secondary tuberculosis.

68. Name the form of secondary tuberculosis:
Variants of answer:
a) infiltrative;
b) with extrapulmonary lesions;
c) tuberculous sepsis;
d) tuberculosis of the genitourinary system;
e) tuberculosis of bones.

69. Secondary tuberculosis develops against the background of:
Variants of answer:
a) relative immunity;
b) sensitization;
c) sustained immunity;
d) immunodeficiency;
e) autoimmunization.

70. Name the form of tuberculosis that develops as infiltrative tuberculosis progresses:
Variants of answer:
a) Abrikosov's focus;
b) caseous pneumonia;
c) fibrofocal tuberculosis;
d) chronic destructive tuberculosis;
e) fibrocavernous tuberculosis.

25. DISEASES OF THE FEMALE REPRODUCTIVE SYSTEM. PATHOLOGY OF PREGNANCY

Choose one correct variant of answer

1. Estrogen hormones are synthesized:
a) by theca cells of maturing follicles;
b) by granulosa cells of follicles;
c) by cells of the reticular zone of the renal cortex;
d) by chromophobic cells of the pituitary gland;
e) by the pineal gland.

2. Glandular hyperplasia of the endometrium is not observed:

Variants of answer:

a) in young women;
b) in middle-aged women;
c) in elderly women;
d) in ovarian dysfunction;
e) in menstrual cycle disorders.

3. Diseases of the female reproductive system that occur after pregnancy include:

Variants of answer:

a) chorionepithelioma;
b) ectopic pregnancy;
c) placental polyp;
d) uterine birth infection;
e) correct answers a, b, d.

4. The causes of ectopic pregnancy can include all of the listed processes except:

Variants of answer:

a) inflammatory diseases of the fallopian tubes;
b) scarred bends of the fallopian tubes;
c) anomalies in the development of the fallopian tubes;
d) agenesis of the fallopian tubes;
e) tumors of the fallopian tubes.

5. Progesterone hormones are biosynthesized:

Variants of answer:

a) by cells of the reticular zone of the adrenal cortex;
b) by syncytiotrophoblast of the placenta during pregnancy;
c) by theca cells of maturing follicles;
d) by granulosa cells of follicles;
e) correct answers a, b, d.

6. The obligate precancer of the female reproductive organs is:

Variants of answer:

a) atypical glandular hyperplasia of the endometrium;
b) focal adenomatosis of the endometrium;
c) adenomatous polyps of the endometrium;
d) endometrial adenocarcinoma;
e) correct answers a, b, c.

7. In eclampsia, the liver shows:

Variants of answer:

a) hepatocyte dystrophy;

b) hepatocyte necrosis;
c) infiltration with leukemic cells;
d) hemorrhages;
e) correct answers a, b, d.

8. During pregnancy, the following may occur:
Variants of answer:
a) gestosis;
b) placental polyp;
c) premature birth;
d) molar pregnancy;
e) correct answers a, b, d.

9. Estrogen hormones include:
Variants of answer:
a) progesterone;
b) estradiol;
c) estrone;
d) folliculin;
e) correct answers b, c, d.

10. Chronic endometritis is characterized by:
Variants of answer:
a) lymphocytic infiltration;
b) plasmacytic infiltration;
c) sclerosis;
d) all answers are correct;
e) all answers are incorrect.

11. The following types of tubal pregnancy are distinguished:
Variants of answer:
a) ampullary;
b) intramural;
c) isthmic;
d) ovarian;
e) correct answers a, b, c.

12. Postpartum infection can manifest as:
Variants of answer:
a) endometritis;
b) endomyometritis;
c) sepsis;
d) all answers are correct;
e) all answers are incorrect.

13. Estrogens cause in the endometrium:

Variants of answer:

a) proliferation of stromal and glandular cells;

b) secretory changes in glandular epithelium;

c) decidual reaction of stroma;

d) increased vascular permeability;

e) correct answer is a, d.

14. Specify the main theories of the development of cervical erosion:

Variants of answer:

a) autoimmune;

b) inflammatory;

c) traumatic;

d) dysfunctional;

e) correct answer is b, c, d.

15. When entering the abdominal cavity, the fetus may undergo all of the following, except:

Variants of answer:

a) autolysis;

b) petrification;

c) organization;

d) malignization;

e) abdominal pregnancy may occur.

16. The main danger of a blighted ovum is:

Variants of answer:

a) disruption of pregnancy development;

b) fetal death;

c) possible development of a destructive process in the uterus;

d) rapid reduction in the size of the uterus;

e) possible development of congenital anomalies.

17. Diseases of the female genital organs are classified into the following groups:

Variants of answer:

a) inflammatory;

b) immunopathological;

c) dysfunctional;

d) neoplastic;

e) correct answer is a, c, d.

18. The following do not belong to the types of erosions of the cervix:
Variants of answer:
a) simple;
b) glandular;
c) papillary;
d) glandular-papillary;
e) fibrous-cystic.

19. An ectopic pregnancy is:
Variants of answer:
a) pregnancy in the cervix;
b) pregnancy in the fallopian tube;
c) pregnancy in the ovaries;
d) pregnancy in the abdominal cavity;
e) all answers are correct.

20. The following are not considered induced abortions:
Variants of answer:
a) abortion for medical reasons;
b) abortion by the woman's request;
c) criminal abortion;
d) abortion for social reasons;
e) spontaneous abortion.

21. Acute endometritis can be:
Variants of answer:
a) destructive;
b) interstitial;
c) purulent-fibrinous;
d) hemorrhagic;
e) alternative.

22. Specify the types of healing of cervical pseudo-erosions:
Variants of answer:
a) dysplastic;
b) superficial;
c) deep;
d) induced;
e) correct answer is b, c.

23. Clinical manifestations of tubal pregnancy include:
Variants of answer:
a) elevated body temperature;
b) lower abdominal pain;

c) bloody discharge from the genital tract;
d) all answers are correct;
e) none of the answers are correct.

24. Eclampsia cannot be:
Variants of answer:
a) as a manifestation of early preeclampsia;
b) as a manifestation of late preeclampsia;
c) before delivery;
d) during delivery;
e) after delivery.

25. The causative agents of acute endometritis include everything except:
Variants of answer:
a) viruses;
b) staphylococci;
c) enterococci;
d) E. coli;
e) anaerobic bacteria.

26. A placental polyp is:
Variants of answer:
a) a glandular polyp of the endometrium;
b) one of the uterine tumors;
c) organized remnants of the fetal egg in the uterine cavity;
d) complete abortion with inflammation and organization;
e) a pathology not related to pregnancy.

27. The following is not considered an early manifestation of preeclampsia:
Variants of answer:
a) nausea in pregnancy;
b) excessive salivation;
c) taste perversion;
d) hydrothorax in pregnancy;
e) ptyalism.

28. The following contribute to postpartum uterine involution disorders:
Variants of answer:
a) complete expulsion of the fetal egg from the uterus;
b) presence of remnants of the fetal egg in the uterine cavity;
c) incomplete abortion;
d) placental polyp;
e) correct answers are b, c, d.

29. Chronic endometritis can be:

Variants of answer:

a) atrophic;
b) hypertrophic;
c) cystic;
d) all answers are correct;
e) all answers are incorrect.

30. The danger of a placental polyp lies in the development of all of the following, except:

Variants of answer:

a) purulent-fibrinous endometritis;
b) uterine bleeding;
c) purulent endomyometritis;
d) chorionepithelioma;
e) hypernephroma.

31. The following can be detected in the kidneys during eclampsia:

Variants of answer:

a) congestion of the pyramids;
b) congestion of the cortical layer;
c) necrosis of the tubular epithelium;
d) hemorrhage in the stroma;
e) correct answers are a, b, d.

32. Violation of ectopic pregnancy is accompanied by:

Variants of answer:

a) uterine bleeding;
b) regressive changes in the endometrium;
c) increase in the concentration of steroid sex hormones in the blood;
d) decrease in the concentration of steroid sex hormones;
e) correct answers are a, b, and c.

33. The following are not female sex hormones:

Variants of answer:

a) estrone;
b) gestagen;
c) androgen;
d) progesterone;
e) estradiol.

34. Nabothian cysts are:

Variants of answer:

a) cystic dilated glands of the endometrium;

b) a type of endometrial cancer;
c) retention cysts of the cervix when the outflow ducts are closed;
d) dysplasia of the cervix;
e) a type of cervical cancer.

35. The following are not late gestational disorders:
Variants of answer:
a) polyhydramnios;
b) preeclampsia;
c) nephropathy;
d) eclampsia;
e) ptyalism.

36. The outcomes of tubal pregnancy include:
Variants of answer:
a) complete tubal abortion;
b) incomplete tubal abortion;
c) rupture of the fallopian tube;
d) all answers are correct;
e) all answers are incorrect.

37. The following are not hyperplastic processes in the endometrium:
Variants of answer:
a) glandular polyp;
b) endometrial glandular-cystic hyperplasia;
c) atypical endometrial hyperplasia;
d) simple glandular-cystic hyperplasia of the endometrium;
e) squamous cell metaplasia of the endometrium.

38. A placental polyp can develop as a result of:
Variants of answer:
a) tubal pregnancy;
b) miscarriage;
c) premature labor;
d) emergency delivery;
e) correct answers are b, c, and d.

39. The diagnostic criteria for tubal pregnancy are:
Variants of answer:
a) presence of chorionic villi in the tube;
b) presence of decidual tissue in the tube;
c) presence of fetal tissue in the tube;
d) all answers are correct;
e) all answers are incorrect.

40. Choriocarcinoma can develop as a result of:
Variants of answer:
a) molar pregnancy;
b) endometritis;
c) true erosion of the cervix;
d) pseudoerosion of the cervix;
e) adenomatous polyp of the uterus.

CORRECT ANSWERS

1. Parenchymal intracellular degenerations

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	b	15	d	29	d	43	c
2	a	16	b	30	e	44	d
3	a	17	b	31	d	45	b
4	b	18	a	32	e	46	c
5	c	19	b	33	b	47	d
6	a	20	c	34	b	48	e
7	e	21	c	35	a	49	d
8	a	22	b	36	e	50	a
9	d	23	c	37	c	51	b
10	c	24	d	38	b	52	b
11	c	25	a	39	a	53	e
12	d	26	b	40	e	54	b
13	b	27	c	41	d	55	b
14	c	28	c	42	e		

2. Mesenchymal degenerations

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	23	c	45	a	67	b
2	b	24	b	46	e	68	b
3	e	25	d	47	a	69	d
4	c	26	e	48	e	70	b
5	b	27	e	49	b	71	c
6	e	28	e	50	d	72	c
7	b	29	a	51	a	73	c
8	a	30	c	52	c	74	b
9	c	31	e	53	c	75	d
10	d	32	d	54	b	76	e
11	e	33	d	55	c	77	b
12	c	34	e	56	e	78	d
13	b	35	d	57	c	79	b
14	c	36	d	58	a	80	d
15	b	37	c	59	e	81	d
16	b	38	b	60	a	82	c
17	a	39	e	61	d	83	b
18	e	40	c	62	b	84	d
19	d	41	b	63	b	85	d
20	c	42	c	64	a		
21	d	43	d	65	e		
22	b	44	a	66	d		

3. Mixed degenerations

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	c	22	a	43	b	64	d
2	b	23	a	44	c	65	c
3	d	24	b	45	b	66	d
4	c	25	d	46	d	67	c
5	b	26	a	47	b	68	b
6	c	27	b	48	c	69	a
7	a	28	c	49	c	70	e
8	a	29	a	50	b	71	b
9	d	30	c	51	c	72	d
10	a	31	b	52	b	73	c
11	a	32	a	53	d	74	c
12	a	33	b	54	b	75	c
13	a	34	a	55	c	76	d
14	a	35	a	56	b	77	e
15	b	36	b	57	d	78	b
16	c	37	a	58	a	79	e
17	d	38	a	59	b	80	c
18	a	39	a	60	d	81	b
19	c	40	c	61	d		
20	b	41	c	62	b		
21	d	42	b	63	c		

4. Necrosis, apoptosis

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	22	c	43	b	64	b
2	e	23	e	44	a	65	a
3	d	24	b	45	b	66	d
4	c	25	d	46	a	67	a
5	c	26	c	47	d	68	e
6	b	27	e	48	d	69	a
7	c	28	b	49	b	70	b
8	d	29	c	50	b	71	a
9	a	30	b	51	a	72	c
10	c	31	d	52	e	73	d
11	c	32	d	53	e	74	d
12	a	33	a	54	a	75	c
13	d	34	a	55	e	76	d
14	b	35	c	56	c	77	d
15	d	36	c	57	d	78	a
16	a	37	e	58	c	79	a
17	c	38	a	59	b	80	d
18	d	39	d	60	a	81	b
19	d	40	d	61	a	82	a
20	d	41	d	62	c	83	a
21	c	42	a	63	a	84	b

5. Circulatory disorders. hyperemia. Stasis

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	19	a	37	b	55	a
2	c	20	e	38	d	56	a
3	c	21	b	39	b	57	b
4	e	22	b	40	a	58	b
5	b	23	b	41	c	59	d
6	a	24	c	42	e	60	c
7	a	25	b	43	b	61	a
8	d	26	d	44	a	62	e
9	c	27	a	45	b	63	c
10	d	28	e	46	e	64	e
11	e	29	d	47	e	65	d
12	d	30	b	48	a	66	b
13	d	31	d	49	d	67	b
14	b	32	a	50	e	68	c
15	e	33	d	51	a	69	c
16	b	34	e	52	a		
17	a	35	c	53	b		
18	d	36	b	54	b		

6. Thrombosis. Embolism. Infarction

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	b	17	c	33	a	49	d
2	c	18	e	34	d	50	a
3	b	19	e	35	b	51	e
4	c	20	a	36	c	52	d
5	b	21	a	37	c	53	a
6	a	22	b	38	c	54	e
7	e	23	a	39	c	55	e
8	d	24	e	40	d	56	a
9	d	25	c	41	b	57	c
10	d	26	b	42	b	58	b
11	c	27	a	43	b	59	a
12	c	28	a	44	c	60	b
13	e	29	c	45	c	61	d
14	c	30	b	46	e	62	a
15	a	31	e	47	b	63	d
16	a	32	c	48	d	64	d

7. Inflammation

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	31	d	61	d	91	a
2	d	32	d	62	b	92	d
3	d	33	c	63	c	93	d
4	e	34	c	64	d	94	d
5	c	35	e	65	a	95	c
6	c	36	d	66	c	96	b
7	c	37	d	67	a	97	b
8	a	38	c	68	a	98	c
9	c	39	d	69	b	99	c
10	e	40	e	70	c	100	d
11	b	41	c	71	c	101	c
12	c	42	d	72	d	102	e
13	e	43	c	73	b	103	e
14	d	44	b	74	b	104	b
15	d	45	d	75	b	105	b
16	d	46	a	76	d	106	d
17	d	47	b	77	b	107	d
18	d	48	a	78	e	108	d
19	b	49	c	79	c	109	a
20	e	50	d	80	b	110	c
21	d	51	b	81	b	111	c
22	d	52	a	82	b	112	c
23	d	53	d	83	c	113	e
24	e	54	c	84	c	114	c
25	d	55	e	85	d	115	b
26	d	56	c	86	a	116	d
27	a	57	b	87	c	117	c
28	d	58	b	88	d		
29	c	59	b	89	d		
30	c	60	b	90	d		

8. Tissue repair, regeneration and adaptation

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	c	21	b	41	b	61	a
2	d	22	c	42	d	62	e
3	d	23	c	43	a	63	c
4	e	24	d	44	c	64	b
5	d	25	b	45	d	65	c
6	d	26	a	46	b	66	a
7	d	27	b	47	c	67	e
8	b	28	b	48	e	68	d
9	e	29	d	49	c	69	a
10	d	30	d	50	d	70	e
11	a	31	c	51	c	71	a
12	b	32	a	52	e	72	d
13	e	33	d	53	c	73	b
14	e	34	d	54	b	74	a
15	a	35	a	55	b	75	b
16	a	36	c	56	d	76	d
17	c	37	b	57	d	77	c
18	e	38	b	58	c		
19	b	39	d	59	d		
20	a	40	d	60	c		

9. Tumors. Part 1

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	16	a	31	d	46	a
2	d	17	a	32	b	47	d
3	e	18	a	33	a	48	e
4	c	19	e	34	c	49	a
5	d	20	d	35	e	50	e
6	e	21	d	36	c	51	b
7	a	22	e	37	d	52	a
8	b	23	e	38	b	53	c
9	d	24	e	39	b	54	d
10	a	25	e	40	a	55	b
11	e	26	c	41	d	56	e
12	d	27	c	42	e	57	a
13	b	28	c	43	a	58	b
14	d	29	a	44	c		
15	b	30	b	45	e		

10. Tumors. Part 2

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	d	35	a	69	b	103	a
2	e	36	e	70	b	104	c
3	e	37	e	71	a	105	a
4	e	38	a	72	c	106	b
5	b	39	c	73	c	107	c
6	a	40	e	74	d	108	c
7	d	41	e	75	e	109	c
8	c	42	b	76	b	110	b
9	e	43	c	77	a	111	d
10	b	44	d	78	e	112	c
11	e	45	b	79	e	113	b
12	d	46	b	80	a	114	d
13	c	47	b	81	b	115	d
14	b	48	c	82	d	116	a
15	d	49	d	83	c	117	b
16	c	50	b	84	e	118	a
17	a	51	d	85	b	119	a
18	b	52	c	86	c	120	b
19	b	53	b	87	d	121	b
20	c	54	d	88	b	122	c
21	a	55	a	89	e	123	c
22	a	56	b	90	d	124	a
23	e	57	a	91	b	125	e
24	d	58	a	92	c	126	c
25	a	59	b	93	e	127	b
26	a	60	d	94	b	128	e
27	e	61	a	95	c	129	a
28	d	62	d	96	e	130	e
29	b	63	b	97	c	131	a
30	c	64	e	98	c	132	b
31	d	65	e	99	b	133	b
32	e	66	b	100	d	134	d
33	d	67	d	101	a		
34	d	68	b	102	a		

11. Tumors. Part 3

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	17	d	33	c	49	d
2	a	18	a	34	b	50	c
3	e	19	e	35	e	51	b
4	c	20	e	36	b	52	b
5	d	21	b	37	c	53	d
6	e	22	d	38	d	54	c
7	a	23	b	39	d	55	e
8	e	24	c	40	c	56	d
9	a	25	d	41	a	57	b
10	d	26	d	42	a	58	b
11	d	27	b	43	b	59	b
12	c	28	c	44	d	60	c
13	c	29	a	45	b	61	d
14	e	30	d	46	e	62	d
15	b	31	d	47	a	63	c
16	a	32	d	48	c		

12. Atherosclerosis. Arterial hypertension. Coronary artery disease

№ question	Correct answers	№ question	Correct answers	52№ question	Correct answers	№ question	Correct answers
1	e	18	b	35	b	53	b
2	a	19	a	36	b	54	c
3	c	20	a	37	a	55	b
4	a	21	c	38	d	56	b
5	d	22	b	39	d	57	b
6	c	23	c	40	b	58	e
7	e	24	b	41	d	59	e
8	a	25	d	42	a	60	c
9	b	26	b	43	e	61	b
10	b	27	c	44	d	62	d
11	a	28	c	45	c	63	c
12	b	29	e	46	d	64	a
13	d	30	c	47	e	65	a
14	a	31	a	48	b		
15	c	32	d	49	c		
16	b	33	c	50	e		
17	c	34	b	51	a		

13. Systemic connective tissue diseases. Rheumatism. Vasculitis

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	d	15	e	29	c	43	d
2	e	16	c	30	d	44	e
3	e	17	c	31	c	45	e
4	b	18	d	32	a	46	c
5	a	19	c	33	d	47	e
6	e	20	a	34	b	48	e
7	e	21	b	35	d	49	d
8	d	22	a	36	d	50	e
9	b	23	c	37	d	51	b
10	a	24	c	38	b	52	b
11	b	25	a	39	b	53	e
12	d	26	b	40	e	54	d
13	d	27	d	41	c		
14	a	28	b	42	c		

14. Acute respiratory infections of the lungs

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	d	8	c	15	b	22	b
2	e	9	c	16	e	23	a
3	e	10	e	17	e	24	e
4	a	11	d	18	b	25	a
5	e	12	c	19	d	26	d
6	d	13	a	20	c	27	e
7	d	14	d	21	d	28	c

15. Chronic nonspecific lung diseases

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	7	e	13	b	19	e
2	e	8	b	14	e	20	c
3	e	9	e	15	c	21	e
4	c	10	e	16	a	22	d
5	c	11	c	17	e	23	d
6	c	12	c	18	a		

16. Diseases of the gastrointestinal tract

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	b	10	b	19	b	28	a
2	a	11	c	20	d	29	d
3	a	12	c	21	c	30	c
4	d	13	d	22	d	31	d
5	b	14	a	23	b	32	c
6	c	15	d	24	a	33	e
7	a	16	d	25	c	34	a
8	e	17	a	26	e		
9	d	18	b	27	b		

17. Liver diseases

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	9	c	17	b	25	c
2	d	10	b	18	a	26	e
3	e	11	b	19	a	27	d
4	d	12	c	20	a	28	b
5	e	13	e	21	b	29	b
6	d	14	b	22	c		
7	a	15	d	23	b		
8	d	16	e	24	d		

18. Kidney diseases

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	b	11	d	21	c	31	a
2	c	12	e	22	e	32	b
3	a	13	e	23	e	33	d
4	a	14	c	24	a	34	c
5	a	15	a	25	b	35	e
6	d	16	b	26	b	36	a
7	e	17	c	27	d	37	c
8	d	18	a	28	a	38	a
9	b	19	b	29	c	39	b
10	d	20	b	30	a	40	a

19. Pathology of the endocrine system

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	9	e	17	b	25	d
2	b	10	a	18	c	26	b
3	e	11	c	19	c	27	d
4	d	12	d	20	b	28	c
5	e	13	e	21	c	29	c
6	b	14	d	22	a	30	e
7	a	15	d	23	a		
8	e	16	b	24	d		

20. Sepsis

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	10	e	19	c	28	c
2	d	11	a	20	a	29	e
3	b	12	a	21	c	30	a
4	c	13	b	22	e	31	b
5	c	14	a	23	e	32	b
6	b	15	a	24	a	33	c
7	e	16	b	25	d	34	a
8	e	17	a	26	b	35	a
9	b	18	d	27	e	36	a

21. Intestinal infections

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	c	14	c	27	a	40	c
2	b	15	a	28	d	41	c
3	d	16	c	29	d	42	d
4	d	17	a	30	b	43	b
5	c	18	a	31	c	44	e
6	a	19	b	32	c	45	b
7	d	20	d	33	c	46	b
8	c	21	c	34	c	47	d
9	c	22	c	35	d	48	d
10	c	23	d	36	e	49	c
11	c	24	b	37	d	50	e
12	e	25	c	38	e		
13	d	26	d	39	d		

22. Viral infections

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	15	b	29	a	43	e
2	b	16	d	30	d	44	e
3	d	17	c	31	c	45	b
4	c	18	d	32	e	46	c
5	d	19	c	33	b	47	c
6	b	20	c	34	e	48	d
7	b	21	d	35	b	49	a
8	c	22	c	36	d	50	b
9	c	23	a	37	e	51	a
10	e	24	d	38	b	52	c
11	c	25	c	39	e	53	e
12	a	26	b	40	e	54	e
13	e	27	e	41	c	55	a
14	c	28	e	42	b		

23. Pediatric infections

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	b	5	a	9	e	13	d
2	c	6	d	10	e	14	d
3	a	7	a	11	c	15	e
4	a	8	d	12	c		

24. Tuberculosis

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	e	19	e	37	e	55	b
2	c	20	a	38	d	56	c
3	c	21	e	39	a	57	b
4	c	22	e	40	e	58	c
5	b	23	b	41	b	59	d
6	a	24	a	42	c	60	b
7	d	25	b	43	c	61	e
8	b	26	b	44	d	62	d
9	b	27	d	45	e	63	e
10	d	28	c	46	d	64	c
11	b	29	e	47	e	65	a
12	b	30	e	48	b	66	c
13	d	31	b	49	b	67	e
14	c	32	a	50	e	68	a
15	d	33	b	51	b	69	a
16	e	34	b	52	c	70	b
17	c	35	d	53	c		
18	e	36	c	54	c		

25. Diseases of the female reproductive system. Pathology of pregnancy

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	a	11	e	21	c	31	e
2	a	12	d	22	e	32	e
3	e	13	e	23	d	33	c
4	d	14	e	24	a	34	c
5	e	15	d	25	a	35	e
6	e	16	c	26	c	36	d
7	e	17	e	27	d	37	e
8	e	18	e	28	e	38	e
9	e	19	e	29	d	39	d
10	d	20	e	30	e	40	a

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Тищенко Григорий Витальевич,
Шибанова Людмила Александровна,
Зиновкин Дмитрий Александрович и др.

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