1. In the uterine cavity an embryo was found that was not attached to the endometrium. What stage of embryonal development is it?

a. Gastrula
b. Neurula
c. Mulberry body
d. Blastocyst
e. Zygote

2. For caries prevention, dentists recommend limiting the intake of simple carbohydrates. What is the role of a cariogenic diet in the pathogenesis of defects of hard dental tissues?

a. Decrease of pH in the oral cavity
b. Formation of chelating substances
c. Activation of remineralization process
d. Saturation of dental enamel with fluorine
e. Disorders of calcium and phosphorus metabolism

3. Histologic examination of an eye specimen shows multilayer structure. The outermost layer is represented by special pigment epithelium, which is composed of cuboidal melanin-containing cells that absorb light. The photoreceptor layer contains photosensitive outer segments of rods and cones. Which of the following eye structures is mentioned?

a. Choroid
b. Retina
c. Iris
d. Sclera
e. Ciliary body

4. A 38-year-old woman has developed a bronchial asthma attack. What broncholytic that is a β_2-adrenergic agonist would be effective for providing emergency aid in this case?

a. Ipratropium bromide
b. Salbutamol
c. Atropine
d. Platyphyllinum
e. Adrenaline

5. A 43-year-old woman against the background of septic shock presents with thrombocytopenia, low fibrinogen levels, fibrin degradation products in the blood, and development of petechial hemorrhages. What is the cause of these pathological signs?

a. DIC syndrome
b. Impaired platelet production
c. Hemorrhagic diathesis
d. Autoimmune thrombocytopenia
e. Exogenous intoxication

6. The bile, secreted in the duodenum, contains bile acids and participates in emulsification and digestion of lipids. What acid is a component of bile?

a. Linoleic acid
b. Myristic acid
c. Cholic acid
d. Arachidonic acid
e. Oleic acid

7. A patient was diagnosed with acute glomerulonephritis. What substance in the urine indicates a damage to the basement membrane of the renal glomerular capillaries in case of this pathology?

a. Fructose
b. Creatine
c. Indican
d. Protein
e. 17-ketosteroids

8. A patient was diagnosed with a monogenic hereditary disease. Name this disease:
a. Hymenolepiasis
b. Peptic ulcer disease of the stomach
c. Hypertension
d. Hemophilia
e. Poliomyelitis

9. During an accident on a nuclear submarine, a conscript soldier received a radiation dose of 5 Gy. He complains of headache, nausea, and dizziness. What changes in the leukocyte count can be expected after such irradiation?
a. Neutrophilic leukocytosis
b. Lymphocytosis
c. Leukopenia
d. Agranulocytosis
e. Anemia

10. A patient was diagnosed with meningitis. A puncture of the subarachnoid space is necessary. This space can be located between the following structures:
a. Arachnoid mater and pia mater
b. Dura mater and arachnoid mater
c. ---
d. Periosteum and arachnoid mater
e. Periosteum and dura mater

11. An enzyme that binds with the substrate uses only a part of its molecule to interact with it. Name this part of the enzyme molecule:
a. Active site
b. Coenzyme
c. Allosteric site
d. Cofactor
e. Segment of a polypeptide chain

12. A 58-year-old male patient visited his dentist with the chief complaint of itching and burning sensation in his mouth. On intraoral examination, diffuse white patches were seen on his tongue, right and left buccal mucosa, as well as on his hard palate and soft palatal region. The potassium hydroxide (KOH) preparation of the specimen revealed non-pigmented septate hyphae. Administration of which of the following is the most appropriate initial step in treatment of this patient?
a. Gentamicin
b. Nystatin
c. ---
d. Tetracycline
e. Penicillin

13. A patient developed hypersalivation during dental manipulations. What group of medicines reduces this phenomenon?
a. Astringents
b. Cholinergic agonists
c. Adrenergic antagonists
d. Cholinergic antagonists
e. Adrenergic agonists

14. A 58-year-old man presents with the clinical picture of acute pancreatitis. This diagnosis can be confirmed by high levels of a certain substance in the patient's urine. Name this substance:
a. Residual nitrogen
b. Albumin
c. Uric acid
d. Amylase
e. Urea

15. A 58-year-old woman comes to her dentist complaining of a <<strange mass>> in her mouth. On intraoral examination of the oral mucosa the dentist reveals a vegetative lesion with a pedunculated base observed at the soft palate level lateral to the base of the uvula. An excisional biopsy is performed and histopathological examination shows proliferations of stratified keratinized squamous epithelium with fibrovascular connective tissue stroma and many papillary infoldings of the epithelium. Which of the following is the most likely pathology revealed by the dentist?

a. Basal-cell carcinoma
b. Fibrolipoma
c. Epithelial hyperplasia
d. Fibroma
e. Papilloma

16. A patient being treated for viral B hepatitis developed signs of hepatic failure. What changes in the blood test that indicate a protein metabolism disorder will most likely be observed in this case?

a. Absolute hypoalbuminemia
b. Absolute hyperalbuminemia
c. Absolute hyperfibrinogenemia
d. Blood protein composition is \\ unchanged
e. Absolute hyperglobulinemia

17. Calcification of dental tissues is significantly influenced by osteocalcin protein which has an ability to bind calcium ions due to the presence of the following modified amino acid residues in the polypeptide chain:

a. Carboxy aspargine
b. Alanine
c. δ-aminopropionic
d. γ-carbon glutamine
e. γ-aminobutyric

18. During examination, a 7-year-old child was diagnosed with multiple caries by the dentist. What medicine should be recommended for caries prevention in this case?

a. Calcium gluconate
b. Calcium chloride
c. Calmecin
d. Calcium glycerophosphate
e. Calcium hydroxide

19. A patient was diagnosed with multiple myeloma. Total blood protein is 180 g/L. What proteins, present in the body, are the cause of such total protein value?

a. Transferrin
b. Bence-Jones protein
c. Albumins
d. Immunoglobulins
e. Haptoglobin

20. During histologic examination of the skeletal muscle specimen, the investigator discovers an organelle that has 2 membranes: smooth outer membrane and internal, that forms multiple ridges of visible folds (crysts). Which of the following is the most likely function of this structure?

a. ---
b. Formation of mitotic spindle
c. Intracellular digestion of macromolecules
d. Synthesis of carbohydrates
e. Synthesis and energy accumulation in the form of ATP

21. The parents of a newborn came for medical and genetic counseling. Their baby is suspected to have Edwards syndrome that manifests as micrognathia, microstomia, and a short upper lip. What testing methods are necessary to clarify the diagnosis?

a. Clinical genealogy

b. Dermatoglyphics
c. Immunogenetics
d. Biochemistry
e. Cytogenetics

22. Cells of sensory spinal ganglions are a part of reflex arches. What type of neurons are these cells?
a. Pseudounipolar
b. ---
c. Multipolar
d. Bipolar
e. Unipolar

23. When extracting a tooth, the dentist destroys the bonds between the cementum of the dental root and the tooth socket. What structure is it?
a. Gingiva
b. Periodontium
c. Cementum
d. Pulpa dentis
e. Dentinum

24. During a fire, a person developed carbon monoxide poisoning. What changes occurred in the patient's blood as a result?
a. Formation of carboxyhenoglobin
b. Formation of reduced hemoglobin
c. Formation of carbhemoglobin
d. Development of acidosis
e. Formation of methemoglobin

25. A 40-year-old male comes to the physician because of recurrent painful flares and swelling of the metatarsal-phalangeal joint of the great toe. Laboratory study of urine sample shows extremely low pH and pink discoloration. Which of the following metabolic intermediates is the most likely cause of changes in this patient's urine?
a. Chloride
b. Magnesium sulfate
c. Tricalcium phosphate
d. Ammonia
e. Uric acid

26. A 32-year-old woman presents with increased facial hair growth, headache and decreased libido. She is also currently concerned about sweating excessively even at room temperature. Neurological examination shows loss of visual acuity in both temporal fields of views. A skull X-ray shows sella turcica enlargement and deformity. Which of the following anatomic structures would you most likely expect to be abnormal in this patient?
a. ---
b. Pineal gland
c. Hypothalamus
d. Thalamus
e. Pituitary gland

27. A glucocorticoid ointment has been prescribed to a patient for periodontitis treatment. Name this medicine:
a. Tetracycline
b. Decamin (Dequalinium)
c. Erythromycin
d. Prednisolone
e. Ampicillin

28. What mineral substance is present in the dental hard tissues in the largest amount?
a. Calcium phosphate [Ca_10(PO_4)_6]

b. Carbonate apatite [Ca_10(PO_4)_5CO_3]
c. Hydroxyapatite [Ca_10(PO_4)_6(OH)_2]
d. Chlorapatite [Ca_10(PO_4)_6Cl_2]
e. Fluorapatite [Ca_10(PO_4)_6F_2]

29. The prisoner, who went on a hunger strike, developed edemas. What is the mechanism of edema development in this case?
a. Increased oncotic tissue pressure
b. Decreased oncotic blood pressure
c. Increased hydrostatic venous pressure
d. Reduction in circulating blood volume
e. Decreased hydrostatic tissue pressure

30. In histogenesis of bone tissue, two ways of its development are possible. What stages are not characteristic of membranous osteogenesis?
a. Formation of epiphyseal centers of ossification
b. Formation of reticulofibrous bone
c. Osteoid stage
d. Formation of osteogenic buds within mesenchyme
e. Replacement of reticulofibrous bone tissue with lamellar bone tissue

31. A section of a multi-rooted tooth shows a tissue located at the apices of the dental roots and in the place of their branching. This tissue contains cells with processes located in the lacunae, and numerous collagen fibers arranged radially or longitudinally. Name this tissue:
a. Dense connective tissue
b. Reticulofibrous bone tissue
c. Cellular cement
d. Dentin
e. Enamel

32. A skin injury with damage to the reticular layer of the dermis was received. The regeneration of this layer will occur because of the activity of certain cells. Name these cells.
a. Tissue basophils
b. Lymphoblasts
c. Plasma cells
d. Fibroblasts
e. Macrophages

33. Cytogenetic analysis allowed to determine the patient's karyotype --- 47, XY, +21/46, XY. Name this condition:
a. Translocation
b. Deletion
c. Genocopy
d. Mosaicism
e. Phenocopy

34. In the peripheral zone of the pulp, the cell activity is temporarily inhibited for certain reasons. What dental tissue is at risk of developing a deficiency of its physiological regeneration in this case?
a. Dentin
b. Acellular cementum
c. Pulp
d. Cellular cementum
e. Enamel

35. Microscopy of dental plaque revealed unicellular organisms. Their cytoplasm had two distinct layers, barely visible core, wide pseudopodia. The patient is most likely to have:
a. Entamoeba histolytica
b. Trichomonas tenax
c. Lamblia

d. Entamoeba gingivalis
e. Entamoeba coli

36. A group of dental students is studying bacteria and their pathogenesis. They have identified that a substantial number of bacteria cause human diseases by producing a poisonous substance. This substance is typically a protein, that has different mechanisms of action and acts at different sites. It is secreted by anaerobic bacteria and leads to a potentially life threatening symptoms which can be prevented by administration of specific antibodies. Which of the following is the most likely substance?
a. Toxoid
b. Enterotoxin
c. Antitoxin
d. ---
e. Exotoxin

37. Purulent exudate accumulates in the abdominal cavity of a patient with peritonitis. The exudate contains a large amount of neutrophils. What is the main function of neutrophil granulocytes in the inflammation focus?
a. Phagocytosis
b. Release of histamine
c. Degranulation
d. Secretion of prostaglandins
e. Regulation of local blood circulation

38. Salivary α-amylase catalyzes the hydrolysis of α-1,4-glycosidic bonds of starch. What ions function as its activators?
a. Sodium ions
b. Potassium ions
c. Copper ions
d. Lead ions
e. Zinc ions

39. Experimental studies of membrane ionic currents in the dynamics of action potential development have shown that the ionic current that causes the repolarization phase can be classified as:
a. Passive potassium current
b. Passive sodium current
c. Active potassium current
d. Active chlorine current
e. Active sodium current

40. During laboratory testing of the blood of a deceased person, the forensic pathologist diagnosed cyanide poisoning. What was the cause of death in this case?
a. Production of reduced hemoglobin
b. Carboxyhemoglobin production
c. Carbhemoglobin production
d. A change in blood pH
e. Methemoglobin production

41. A person, who came to a hospital with complaints of diarrhea, was diagnosed with amoebic dysentery. Tetracycline was prescribed to the patient as a part of complex treatment. Name the type of action of this medicine:
a. Irreversible
b. Primary
c. Reflex
d. Direct
e. Etiotropic

42. After a removal of the pyloric part of the stomach, a person may develop anemia. What is the cause of pathological condition development in this case?

a. Impaired absorption of vitamin D
b. Impaired absorption of vitamin E
c. Impaired absorption of vitamin C
d. Bone marrow dysfunction
e. Lack of intrinsic Castle factor

43. During the examination of a pregnant woman, a dentist detected 3 round formations on her oral mucosa. The formations appeared 3 days ago. They have a white-gray surface with a red rim and are up to 1 cm in diameter. What is the diagnosis in this case?
a. Catarrhal stomatitis
b. Aphthous stomatitis
c. Leukoplakia
d. Necrotizing ulcerative stomatitis
e. Gangrenous stomatitis

44. Name the sequence of special functional DNA segments and structural genes that encode synthesis of a certain group of proteins that belong to one metabolic series.
a. Operon
b. Promoter
c. Operator
d. Regulator gene
e. Terminator

45. In an experiment, an excitable cell was placed into a saline solution without sodium ions. How will it change the development of action potential in the cell?
a. Duration of the action potential increases
b. Amplitude of the action potential increases
c. Action potential does not develop
d. Amplitude of the action potential decreases
e. Duration of the action potential decreases

46. A patient has a long history of dental caries. The pulp of the affected tooth started to resemble a gray-black mass with a putrid odor. Microscopically, it is unstructured and contains microbes. What pathological process has developed in the dental pulp in this case?
a. Pulp gangrene
b. Granulating pulpitis
c. Purulent pulpitis
d. Fibrous pulpitis
e. Serous pulpitis

47. A girl presents with high fever and sore throat. Objectively, the soft palate is swollen, the tonsils are covered with gray films. The films are firmly attached and leave deep bleeding lesions when removed. What is the most likely disease in this case?
a. Pharyngeal diphtheria
b. Lacunar tonsillitis
c. Infectious mononucleosis
d. Necrotic tonsillitis
e. Pseudomembranous (Vincent's) \\ tonsillitis

48. During a surgery on the right side of the neck, excursion of the right diaphragmatic dome was disturbed. This disturbance occurred because of the damage to the following nerve:
a. Left transverse cervical nerve
b. Right phrenic nerve
c. Right transverse cervical nerve
d. Supraclavicular nerve
e. Left phrenic nerve

49. Fluorination of teeth is one of the major procedures which is used for enamel strengthening. Due to fluoride ions and fluoridation of the enamel, the teeth get protection from acidic environment and

therefore dental caries is prevented. Which of the following is the most likely mechanism of fluorine's anticaries effect?

a. Teeth mineralization
b. Fluorapatite synthesis
c. Hydroxyapatite synthesis
d. Chlorapatite synthesis
e. Teeth demineralization

50. The patient's blood levels of calcium ions sharply dropped. It will result in increased secretion of a certain hormone. Name this hormone.

a. Thyrocalcitonin
b. Parathyroid hormone
c. Vasopressin
d. Somatotropin
e. Aldosterone

51. At autopsy, section of the right ovary shows a round lesion 2.5 cm in diameter with a clear serous fluid, surrounded by a smooth glistening membrane. Which of the following macroscopic lesions best represents the autopsy findings?

a. Ulcer
b. Cyst
c. Nodule with central necrosis
d. Nodule
e. Infiltrate

52. A patient has arterial hypertension with signs of angina pectoris. The patient has been prescribed an antianginal drug that is a calcium antagonist. Name this drug.

a. Anaprilin (Propranolol)
b. Metoprolol
c. Pentoxifylline
d. Amlodipine
e. Molsidomine

53. A 60-year-old man with diabetes mellitus is prescribed insulin. What type of pharmacological therapy is it?

a. Pathogenetic
b. Symptomatic
c. Preventive
d. Substitution
e. Etiotropic

54. After a facial injury, the patient has a hematoma on the cheek. What salivary gland is likely to have its outflow blocked by this hematoma?

a. Buccal
b. Parotid
c. Submandibular
d. Labial
e. Sublingual

55. Persistent and heavy proteinuria (albuminuria) associated with nephrotic syndrome leads to hypoalbuminemia, which changes plasma pressure resulting in severe generalized edema. According to the description which of the following circumstances tends to cause nephrotic edema?

a. Decreased venous pressure
b. Decreased plasma oncotic pressure
c. ---
d. Increased plasma oncotic pressure
e. Increased tissue hydrostatic pressure

56. A patient has been hospitalized into the intensive care unit in a severe condition. It is known that

he mistakenly took sodium fluoride that blocks cytochrome oxidase. What type of hypoxia has developed in the patient?

a. Hypoxic hypoxia
b. Hemic hypoxia
c. Cardiovascular hypoxia
d. Respiratory hypoxia
e. Tissue hypoxia

57. Ulcer disease of the duodenum has been detected in a 38-year-old man. A treatment was prescribed, after which the patient considered himself to be healthy. However, half a year later the patient developed pain in the epigastrium, heartburn, and insomnia. The patient's condition can be estimated as a:

a. Relapse
b. ---
c. Latent period
d. Development of chronic disease
e. Remission

58. A patient was diagnosed with peptic ulcer disease of the stomach and prescribed an antibacterial treatment. This treatment will be aimed against the following causative agent:

a. Cl. trachomatis
b. St. aureus
c. Cl. perfringens
d. E) coli
e. H. pylori

59. A patient complains of an extremely runny nose and lost sense of smell. Where in the nasal cavity are located the receptors of the olfactory analyzer?

a. Middle nasal meatus
b. Choanae
c. Inferior nasal meatus
d. Common nasal meatus
e. Superior nasal meatus

60. A research lab is investigating the rate of differentiation of hematopoietic cells in order to better understand acute myeloid leukemia in children. A bone marrow biopsy of a 6-year-old boy shows the differentiation stage in which hemopoietic cell extrudes its nucleus. Which of the following processes is most likely assiociated with biopsy findings?

a. Monocytopoiesis
b. Lymphocytopoiesis
c. Thrombopoiesis
d. Erythropoiesis
e. Granulopoiesis

61. A 33-year-old patient complains of an impairment of skin sensitivity in the medial part of the dorsal and palmar surface of hand. Which nerve is damaged?

a. N. radialis
b. N. musculocutaneus
c. N. medianus
d. N. cutaneus antebrachii medialis
e. N. ulnaris

62. A patient feels pain and numbness in the gums of the upper jaw. What nerves are most likely to be damaged in this case?

a. N. alveolaris inferior
b. N. buccalis
c. Nn. alveolaris superiores (n. maxillaris)
d. N. facialis

e. N. lingualis

63. Histological microslide shows cells that form isogenic groups. The intercellular substance contains glycoproteins, proteoglycans, and collagen fibers. What tissue is it?
a. Cartilaginous tissue
b. Mucous tissue
c. White adipose tissue
d. Brown adipose tissue
e. Bone tissue

64. A 36-year-old male comes to the dental office for extraction of the tooth. Two weeks after the procedure is performed, the stratified squamous epithelium regenerates at the site of extraction. Which of the following organelles is most likely involved in the mucosa regeneration?
a. Mitochondria
b. Smooth endoplasmic reticulum
c. Lysosomes
d. Centrosomes
e. Ribosomes

65. Ribosomes are the organelles that bind amino acid residues into a polypeptide chain. The number of ribosomes in the cells of different organs varies and depends on the function of the organ. What organ has the highest ribosome count in its cells?
a. Urinary bladder
b. Epithelium of the renal tubules
c. Secretory cells of the pancreas
d. Outermost layer of epidermis
e. Epithelium of the small intestine

66. A 70-year-old patient is brought to the emeregency department by his son because of blurry vision and dysarthria. His son says, that the father is always thirsty and has difficulty with urination. Examination reveals dry skin, cutaneous vasodilation, nonreactive mydriasis, and hyperthermia. Drug overdose is suspected. Which of the following drugs is the most likely cause of this patient's toxicity?
a. Metamizole
b. Reserpine
c. Clonidine
d. Atropine
e. Carbachol

67. In microanatomy of some organs, there is a sheet-like structure, which underlies virtually all epithelia. It consists of basal lamina (made of type IV collagen, glycoproteins, and proteoglycans) and reticular lamina. Under the microscope, you can see it as a pink line under the epithelial cells. Which of the following is described above?
a. Basement membrane
b. Nucleus
c. ---
d. Plasma membrane
e. Endoplasmic reticulum

68. A 10-year-old Indian boy is brought by his parents to a dentist for a routine dental care. They want to remove the noticeable yellow discoloration of his teeth. His mother reports that they immigrated to Ukraine approximately 6 months ago and a lot of children in their state had the similar staining of their teeth. On intraoral examination there are isolated areas of brown staining, which is particularly severe on the incisors and canines. In addition, some areas have pits which expose the underlying dentin. Which of the following is the most likely diagnosis?
a. Enamel hypoplasia
b. Demineralization stage of caries
c. Acid erosion
d. Enamel erosion

e. Fluorosis

69. A 40-year-old male has hearing impairment and paresis of facial muscles resulting from a blow to his head. He was diagnosed with a hematoma of cerebellopontine angle. What nerves had been damaged?

a. VII, VIII pairs of cranial nerves
b. VIII, IX pairs of cranial nerves
c. ---
d. V, VI pairs of cranial nerves
e. IX, X pairs of cranial nerves

70. Autopsy of the body of a 69-year-old woman, who was overeating and died of an acute myocardial infarction, detected numerous whitish, dense formations in the intima of the coronary arteries. The formations protrude into the vascular lumina, sharply narrowing them. What stage of atherosclerosis can be characterized by these changes?

a. A stage of atheromatous ulcer formation
b. Atherocalcinosis
c. Lipoidosis
d. Liposclerosis
e. Atheromatosis

71. An excessive bone tissue loss is often observed in older people, which indicates osteoporosis development. What bone tissue cells are activated, resulting in the development of this disease?

a. Osteoblasts
b. Osteoclasts
c. Osteocytes
d. Macrophages
e. Tissue basophils

72. After an injury, the patient developed a focus of purulent inflammation in the alveolar process of the jaw in its outward area, with the development of subperiosteal abscess and edema of the adjacent soft tissues. What is the most likely diagnosis in this case?

a. Serous periostitis
b. Chronic fibrous periostitis
c. Purulent periostitis
d. Ossifying periostitis
e. Chronic hyperplastic periostitis

73. A 50-year-old patient suddenly developed headache, dizziness, and nausea. Blood pressure --- 220/110 mm Hg. During the intravenous administration of a 0.1% hygronium solution (trepirium iodide), the patient's condition improved. What is the mechanism of action of this drug?

a. Blockade of ganglionic nicotinic receptors
b. Blockade of Ca^·++ channels
c. Activation of alpha_2-adrenoceptors
d. Angiotensin-converting enzyme blockade
e. Blockade of beta_1-adrenoceptors

74. The dentist should inject a local anesthetic to reduce pain sensation in the maxillary molars and adjacent facial soft tissue and gingiva. He inserts the needle through oral mucosa at the height of the maxillary vestibular fornix just posterior to the maxillary tuberosity. The needle is directed medially and superiorly toward the alveolar canals. Which of the following nerves is most likely to be blocked?

a. Buccal nerve
b. Inferior alveolar nerve
c. ---
d. Nasopalatine nerve
e. Posterior superior alveolar nerve

75. A patient diagnosed with tuberculosis developed red coloring of urine, saliva, and tear fluid after starting the treatment of this disease. Red spots appeared on the patient's underwear. What drug

could have caused these phenomena?

a. Isoniazid
b. Rifampicin
c. Iodine alcohol solution
d. Ciprofloxacin
e. Benzylpenicillin sodium salt

76. A 30-year-old patient was diagnosed with a tumor of the body of the mandible that appeared several months ago. Macroscopically, the tumor was represented by a dense whitish tissue that was destroying the patient's jawbone. After its removal, the tumor was examined microscopically. It was revealed that the tumor consisted of a network of odontogenic epithelial strands with various types of branching. What kind of tumor did the patient have in this case?

a. Acanthomatous ameloblastoma
b. Plexiform ameloblastoma
c. Basal cell ameloblastoma
d. Follicular ameloblastoma
e. Granular cell ameloblastoma

77. A patient has been prescribed pyridoxal phosphate. What processes are corrected with this drug?

a. Synthesis of purine and pyrimidine \\ bases
b. Transamination and decarboxylation \\ of amino acids
c. Oxidative decarboxylation of keto \\ acids
d. Protein synthesis
e. Deaminization of amino acids

78. What factor results in maximal dilation of the gemomicrocirculatory pahtway vessels and their increased permeability?

a. Vasopressin
b. Noradrenaline
c. Serotonin
d. Endothelin
e. Histamine

79. A cytochrome oxidase blocker was given to a test animal, causing its instant death. What chemical can cause these changes?

a. Potassium phosphate
b. Potassium oxalate
c. Potassium nitrite
d. Potassium sulfate
e. Potassium cyanide

80. An extreme undernourishment, known as starvation, can be caused by insufficient protein intake. As an example, Kwashiorkor is a form of malnutrition caused by a lack of protein in the diet where decreased plasma protein concentration leads to increased filtration of fluid into interstitium. Which of the following proteins is the most likely cause of decreased oncotic plasma pressure in a starving patient?

a. β-globulins
b. Albumin
c. Fibrinogen
d. α-globulins
e. γ-globulins