COMMITTEE FOR VETERINARY AND LIVESTOCK DEVELOPMENT
OF THE REPUBLIC OF UZBEKISTAN

SAMARKAND STATE UNIVERSITY OF VETERINARY MEDICINE,
LIVESTOCK AND BIOTECHNOLOGIES

"I APPROVE"
Vice-Rector for Academic Affairs,
Professor _____ A.Elmurodov
"22" 12 2024

# 60840100-VETERINARY MEDICINE
# (BY TYPE OF ACTIVITY) EDUCATIONAL DIRECTION
# QUESTIONS OF THE FINAL STATE CERTIFICATION IN "SPECIAL" SUBJECTS FOR GRADUATES
# 2024-2025 ACADEMIC YEAR

SAMARKAND-2024

**Questions of the final State Certification in "Special disciplines" for graduates of the direction 60840100 - Veterinary medicine (by type of activity) of the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology for the 2024-2025 academic year**

**I. Mandatory subjects:**

| No. | Item name | Number |
|---|---|---|
| 1.17 | Animal pathophysiology | 1-10 |
| 1.18 | Clinical diagnostics and radiology | 11-20 |
| 1.19 | Veterinary pharmacology | 21-30 |
| 1.20 | Operative surgery and topographic anatomy | 31-40 |
| 1.21 | Pathological anatomy, necropsy and forensic veterinary examination | 41-50 |
| 1.22 | Veterinary obstetrics | 51-70 |
| 1.23 | Organization, economics and legislation of veterinary affairs | 71-80 |
| 1.24 | Veterinary and sanitary examination | 81-100 |
| 1.25 | Veterinary surgery | 101-130 |
| 1.26 | Poultry diseases | 131-140 |
| 1.27 | Internal non-communicable diseases | 141-190 |
| 1.28 | Epizootology and infectious diseases | 191 - 240 |
| 1.29 | Veterinary toxicology | 241-260 |
| 1.30 | Parasitology and invasive diseases | 261-300 |

**Compiled by:**

Chairman of the Faculty Methodological Council Professor of the Department of Internal Non-Infectious Diseases — Q.Norboev

Head of the Department Internal non-communicable diseases, associate professor — S.Eshburiev

Head of the Department of Anatomy, histology and pathological anatomy of animals, of veterinary affairs Professor — N.Dilmurodov

Head of department Veterinary surgery and obstetrics professor — B.Narziev

Head of the Department of pharmacology and toxicology of veterinary affairs Professor — Yu.Salimov

Head of the Department of Parasitology and Organization of veterinary affairs Professor — A.Daminov

Head of the Department of Epizootology and infectious diseases, (PhD) — A.Xudjamshukurov

Head of department of Animals physiology, biochemistry and pathological physiology, (PhD) — F.Kurbanov

Head of the Department of Veterinary and Sanitary examination, associate professor — F.Ibragimov

Head of the Department of Diseases of birds, fish, bees and fur animals, associate professor — Z.Mamatova

**Reviewers:**

**Bakirov B.** - Professor of the Department of Internal Non-Infectious Diseases

**Nurullaev A.** - Head of the Department of Veterinary Medicine and Livestock Development of the Samarkand Region, Doctor of biological sciences

**Questions of the final State Certification in "Special disciplines" for graduates of the direction 60840100 - Veterinary medicine (by type of activity) of the Samarkand State University of Veterinary Medicine, Livestock and Biotechnologies for the 2024-2025 academic year**

1. Explain the main stages of pathology development.
2. Explain the general principles of disease classification.
3. Explain the barrier properties of the body.
4. What is allergy, allergic diseases, infectious allergy, autoallergy .
5. Explain the importance of the nervous and humoral systems in reactivity.
6. What is fever, its etiopathogenesis, types, stages and significance for the body.
7. Explain the consequences of disturbances in the biochemical and physicochemical properties of blood.
8. Explain the general circulatory failure in connection with the activity of the heart.
9. Explain the causes of liver dysfunction.
10. What changes are observed with thyroid dysfunction?
11. History and stages of development of clinical diagnostics and radiology.
12. General research methods: examination, palpation, percussion, auscultation and thermometry.
13. Study of the cardiovascular system.
14. Examination of the respiratory system.
15. Examination of the digestive system.
16. Examination of the urinary system.
17. Study of the nervous system.
18. System Research blood formation.
19. Methods for studying the state of metabolism.
20. X-ray examination.
21. The concept of veterinary pharmacology (goals and objectives of the course, connection with other disciplines, history of development).
22. Pharmacodynamics and pharmacokinetics of drugs (sites of action of drugs, routes of administration of drugs into the body).
23. Drugs that depress the central nervous system (narcotics, sedatives and anticonvulsants, antipyretics and analgesics).
24. Central nervous system stimulants (antidepressants, camphor group drugs, caffeine group drugs).
25. Adrenomimetics (the mechanism of action of adrenaline, its use. Drugs affecting the stomach and intestines. Laxatives. Ruminatory agents. Cholinergic agents).
26. Drugs affecting the cardiovascular system (cardiac glycosides, mechanism of action).
27. Pharmacology of vitamins and vitamin-like substances (about water-soluble and fat-soluble vitamins. Multivitamins and their use).
28. Immunostimulants, enzymes, hormones and tissue preparations.

29. Antimicrobial substances. Disinfectants and antiseptics. Formaldehyde group and oxygen-containing substances. Chlorine preparations.

30. Chemotherapeutic agents. Antibiotics. (classes of penicillin's, tetracycline's, streptomycin's, macrolide antibiotics).

31. The importance of anesthesia, pain and its impact on the body: changes in organs and systems. Preparing animals for anesthesia and the technique of its administration.

32. Ovariectomy technique in females: indications, fixation, anesthesia, technique of execution.

33. Special sutures and their application technique (for intestines, blood vessels, nerves and ligaments).

34. Gastrotomy technique in dogs: indications, fixation, anesthesia, instruments, technique of execution (anatomical and topographic features of the stomach, surgical instruments).

35. Technique of rumenotomy in ruminants (indications, fixation, anesthesia, surgical instruments, technique, anatomical topography).

36. Types and composition of surgical operations (bloody and bloodless ; radical and palliative; planned and emergency; septic and aseptic operations, incision, stopping bleeding and tissue fusion).

37. Anatomy and topography of the head (borders, division into layers, blood supply and innervation).

38. Dehorning of calves and methods of removing horns from animals (indications, fixation, timing, methods, anesthesia, instruments and equipment).

39. Technique of applying plaster casts and methods of their use (indications, preparation, types: closed, with a window, layers, bridge-like ).

40. The importance of castration, types and techniques of castration in different animals (indications, fixation, anesthesia, instruments used, open and closed methods, emasculator , percutaneous method).

41. Septic and carbuncular forms of anthrax, etiology, pathogenesis, pathological anatomy , diagnostics and differential diagnostics (hyperplasia, atony, serous-hemorrhagic exudate).

42. Glanders, pneumonia, cutaneous-nasal form of glanders, etiology, pathogenesis, pathological anatomy (nodules, ulcers, lobular).

43. The purpose of a pathological autopsy, types, place, time ( pathological report, forensic veterinary examination, scientific research, food quality).

44. Local pathological changes in diseases, their etiology and pathological anatomy (hyperemia, dystrophy, hemorrhage, necrosis, size, shape, consistency, color, section).

45. Diphtheritic colitis, its etiology, pathogenesis and pathological anatomy (fibrinous inflammation, necrosis, button-shaped nodules, lamellar inflammation).

46. Inflammation. Etiology, types and pathological anatomy of purulent inflammation (abscess, phlegmon, emigration, necrosis).

47. Adenomas and their pathological anatomy (parenchyma, stroma, size, shape, color, consistency, section, mature and immature cells).

48. Pneumonia and pleuritis, their etiology, pathological anatomy (serous, hemorrhagic, fibrinous, lobular, lobar).

49. Fascioliasis (etiology, pathogenesis, pathological diagnostics and differential diagnostics).

50. Rabies (etiology, pathological and differential diagnostics, congestive hyperemia, hemorrhages, Babes-Negri bodies ).

51. Accessory sex glands and the importance of the fluids they secrete (increase in ejaculate volume , anabolic state of spermatozoa, vasopressin, vesicular and bulbous glands).

52. Obstetric and gynecological medical examination (goals, stages: diagnostic, therapeutic and preventive measures).

53. Rectocervical and visocervical methods of artificial insemination (advantages of the method, syringe -catheter, vaginal speculum, pain reaction, infection).

54. Methods of diagnosing infertility and sterility (reflexological, laboratory methods, ultrasound, clinical methods).

55. Diseases and disabilities of newborn animals (asphyxia, absence of anus, rectum, fetal death, urachus fistula).

56. Stages of the sexual cycle and its phenomena (sexual arousal, inhibitory stage, ovulation, discharge, sexual desire).

57. Causes of alimentary infertility and its prevention (feeding standards, deficiency of vitamins and minerals in the diet).

58. Diseases of the uterus, their causes, methods of treatment and prevention (atony, subinvolution , endometritis, myometritis , parametritis, purulent, fibrinous inflammation).

59. Methods of treating mastitis in cows (etiotropic, pathogenetic, physiotherapy, antibiotics and sulfonamides).

60. Retention of placenta in cows (complete, partial, caruncles , coteledons , amnion fluid, conservative method, 1-2% soda -salt solutions).

61. Physiology of labor in animals, types, duration of labor in different animal species. Embryonal membranes and placenta (multiple, false labor, amnion, allantois, chorion, asmochorial, desmochorial , discoid).

62. Artificial insemination of sheep, goats and pigs (liquefied sperm, syringe catheter, semi-automatic syringe, vaginal speculum, visocervical, epicervical , POS-5 method, fractionated method, furacilin solution in a ratio of 1:5000).

63. Treatment and prevention of uterine prolapse in cows (retention of placenta, roughage, completeness of feed, disinfectant solutions, application of bandages).

64. Osteomalacia in cows: causes, symptoms, treatment and prevention (calcium, phosphorus, skin ulcers, 0.5% veratrine solution , retinol , calciferol, 20% glucose solution).

65. Rectal method for determining pregnancy in animals (uterus, uterine horns, ovaries, gloves, caruncles , uterine artery).

66. Tasks and objectives of veterinary obstetrics, role in training veterinary specialists (anatomy and physiology of the reproductive organs, artificial insemination).

67. Purulent-catarrhal endometritis. Causes, pathogenesis, treatment and prevention (obstetric gloves, disinfectant solutions, iodopen , antibiotics).

68. Methods of preparing males to determine heat in females (vasectomy, V.S. Shipilov method, cryptorchidism, surgical methods, excess sperm).

69. Symptomatic infertility, types, causes and prevention (endometritis, diseases of the genital organs, infectious diseases).

70. Macroscopic and microscopic methods for assessing sperm quality (consistency, sperm activity, abnormal sperm shape, color, odor, sperm volume).

71. Organizational structure of the Committee for Veterinary and Livestock Development of the Republic of Uzbekistan.

72. State Veterinary Service and its management.

73. Accounting and documentation in veterinary medicine.

74. Forms of journals, maintenance and execution of documentation in veterinary medicine.

75. Reporting forms in veterinary medicine and the procedure for their preparation.

76. The procedure for identifying, recording and excluding animals from recording.

77. The meaning, principles and types of planning of veterinary measures.

78. Plan of preventive and epizootic measures in veterinary medicine.

79. Organization of veterinary and sanitary supervision.

80. The procedure for issuing veterinary documents when transporting goods under state veterinary control (certificate, certificate).

81. Basic technology and hygiene of primary meat processing in meat enterprises and slaughterhouses (meat-packing plant, poultry house, slaughterhouses, stunning and bleeding, processing of carcasses of slaughtered animals).

82. Morphology, chemical composition and commercial qualities of meat (morphological structure of meat of different animal species, maturation of meat and factors influencing its qualities, classification of animal meat by grade).

83. Veterinary and sanitary examination of infectious diseases (anthrax, tuberculosis, brucellosis, diagnostics before and after slaughter, sanitary assessment of products).

84. Veterinary and sanitary examination of invasive diseases (cysticercosis in cattle and pigs, echinococcosis, sanitary assessment of products).

85. Veterinary and sanitary examination of meat for trichinellosis (pathogen, diagnostics, procedure for checking meat and organs).

86. Veterinary and sanitary examination of products obtained from poisoned animals (diagnostics before and after slaughter, sanitary assessment of meat and meat products).

87. Veterinary and sanitary examination of products from animals that were slaughtered under duress (conditions unacceptable for slaughter, organoleptic, biochemical and microscopic studies).

88. Changes that occur during meat storage and methods for eliminating them (spoilage, sliminess, mold, deactivation of conditionally suitable meat).

89. Veterinary and sanitary examination of poultry meat and eggs (internal and external stunning, categories of meat products, classification of eggs, chemical composition, inspection procedure).

90. Veterinary and sanitary examination of fish and fish products (processing and storage of fish, salting, smoking and canning of fish).

91. Technology of preserving meat and meat products, hygiene and expertise (preservation, methods of preserving at low and high temperatures).

92. Methods of testing canned meat (methods of testing canned goods, biochemical, bacteriological, chemical-toxicological examination).

93. Veterinary and sanitary examination of sausage and smoked products (salting of meat products, smoking, storage of smoked products, packaging and transportation, organoleptic studies).

94. Veterinary and sanitary examination of products and raw materials obtained after slaughter of farm animals (fat, heads, intestines and processed products).

95. Examination of fats obtained from animals (taking samples, testing, determining pathological jaundice).

96. Sanitary and hygienic requirements for milk on dairy farms and its chemical composition (milk hygiene, primary processing of milk on farms, transportation of milk and its defects, milk examination, chemical composition and components).

97. Veterinary and sanitary examination of milk from sick animals (mastitis, brucellosis, milk testing, veterinary and sanitary examination).

98. Veterinary and sanitary examination of plant food products (taking samples of plant products, organoleptic studies, determination of nitrate content).

99. Evaluation of honey by organoleptic indicators, definition of honey obtained from flower nectar and mucus (honey and its indicators, veterinary and sanitary examination of honey, distinction between honey from flower nectar and mucus, verification procedure).

100. Methods for identifying adulterated honey (determination of syrup impurity, acidity, amount of diastase, determination of impurities).

101. Classification of injuries, their etiology, clinical signs and treatment (accidental, cut, lacerated, stab, gunshot, surgical injuries, bleeding, wound edges, cavity, antiseptic solutions, mechanical and chemical antisepsis, antibiotic ointments).

102. Hematomas: causes, clinical picture, types, consequences, treatment (closed mechanical injuries, internal and external, swelling and local temperature, pain, cold and warm compresses, heparin).

103. Burns in animals: etiology, types, degrees, clinical signs and treatment (thermal and chemical burns, aseptic and septic inflammation, severe pain, necrosis, 3% hydrogen peroxide solution, Vishnevsky ointment).

104. Diseases of the stratum corneum and methods of their treatment, yellow mercury ointment, saphrodex and chloramphenicol, FIBS, vitreous body).

105. The essence of chemical antiseptics and its purpose (antiseptic and bacteriostatic substances, suppression of microbial activity, removal of dead tissue, purulent exudate, use in the hydration period, alkaline and oxidative therapy).

106. Causes, clinical signs, consequences and treatment of paraphimosis (death bag, genital organ, septic and aseptic inflammation, paralysis, amputation).

107. Methods of eye examination (keratoscopy, ophthalmoscopy, Purkinje-Sansonov methods).

108. Differential diagnosis of necrosis in animals and treatment methods (wet and dry necrosis, clinical signs, dead tissue, bromothymol blue solution ).

109. Types of fractures in animals, their causes, clinical picture, degrees, treatment and consequences (open and closed fractures, hematoma, lymphostasis, contusion).

110. Methods of treating inflammation with novocaine (the mechanism of action of novocaine, how novocaine is broken down in the body, methods of application).

111. Subject of general veterinary surgery (all types of injuries, their causes, reactivity of different species of animals, etiological and pathogenetic treatment, etc.).

112. Stages of development of infection of traumatic etiology (microbial contamination, microflora and the concept of infection).

113. Agents of actinomycosis, etiology, clinical picture and treatment methods (fungus, surgical intervention, etiopathogenetic treatment).

114. What do you mean by biological antiseptics (preparations of plant, bacterial and animal origin, purpose of use, antibiotics)?

115. Ethology and clinical picture of tendovaginitis (hypodynamia, hoof deformation) depending on the course (acute, chronic, aseptic, purulent and invasive) and exudate (serous, serofibrinous, fibrinous, purulent, hemorrhagic).

116. Partial excision of the wound (reduction of the first stage, infection prevention, 0.5-1% solution of bromothymol blue, methylene blue).

117. Tissue therapy (biostimulants, homogenizers, indications and contraindications, biological testing).

118. Treatment of chronic inflammations (principles, acute, massage, liniments , ointments).

119. Types of lameness (methods of studying leg diseases, spatula, elbow, static and dynamic changes).

120. The concept of veterinary ophthalmology (about science, the degree of occurrence of the disease, brief anatomy of the eye).

121. Classification, clinical features, treatment and prevention of tumors in animals (drainage, disinfectant solutions, granulation tissue).

122. Types of bone fractures (open, closed, plaster, etiology, diagnosis and treatment methods).

123. Local response of the body to injury (the concept of inflammation, aseptic, infectious, normergic, hyperergic and hypoergic inflammation).

124. Veterinary orthopaedics (veterinary orthopaedics, economic damage, hoof cleaning, trimming and tipping).

125. What is phimosis, causes, clinical symptoms, consequences and methods of treatment (initial stage of the disease, swelling and paralysis of the penis).

126. Joint sprains (etiology, diagnosis and treatment methods).

127. Statics and dynamics of the legs (standing, movement, limping).

128. The concept of purulent arthritis, causes, clinical symptoms, consequences and methods of treatment (pathological, primary, simple, complicated, closed pathological changes in joints).

129. Characteristics of primary and secondary intentions, healing with crust formation (aseptic, septic, dead tissue, fibrinous mass).

130. Types of lameness , their description (free, supporting, mixed).

131. Diagnosis, prevention and control of Newcastle disease.

132. Diagnosis, prevention and control of Gumboro disease .

133. Diagnosis, prevention and control of Marek's disease.

134. Diagnostics, prevention and control measures against pullorosis in birds.

135. Diagnostics, prevention and control of respiratory diseases in birds.

136. Diagnostics, prevention and control of digestive system diseases in birds.

137. Diagnostics, prevention and measures to combat hypovitaminosis A, D, E, K in birds.

138. Diagnostics, prevention and control measures against ascariasis and heterocidosis in poultry farms.

139. Diagnostics, prevention and control measures against eimeriosis in industrial poultry farming.

140. Diagnosis, prevention and control of fowl pox.

141. Osteodystrophy (stages of the disease, lysing , radiography, absorption of thoracic vertebrae, calcium and phosphorus ratio, vitamin D, UBN, alost , 10% calcium chloride solution, trivit ).

142. Rakhits ( hypotrophic young animals, calcium, phosphorus, vitamin D).

143. Hypo- and atony of forestomachs (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

144. General therapy of internal non-communicable diseases (general therapy, fundamentals of therapeutic techniques and physiotherapy, treatment methods: etiotropic, pathogenetic, substitution, symptomatic, general stimulating, physiotherapy and diet therapy).

145. Ketosis in cows (definition of ketogenesis, hyperketonemia, ketonuria, ketonolactia, gastroenterological syndrome, hepatotoxic syndrome, neurotic syndrome, acetonemia, fatty degeneration, neutral fats, hepatocytes, ketost, Sharabrin solution).

146. Feed toxicosis (definition, causes, development, diagnostics and differential diagnostics, recommendations of the department's scientists on

treatment. Sources of poisoning in animals: pesticides, mineral fertilizers, mineral and nitrogen additives in feed, spoiled feed, poisonous plants).

147. Posthemorrhagic anemia (causes, development, clinical symptoms, scientifically based diagnostics, treatment and prevention methods, 10% calcium chloride solution, 10% gelatin solution, 5% ascorbic acid solution, physiological sodium chloride solution, Ringer -Locke solution).

148. Classification and syndromes of blood diseases (posthemorrhagic anemia, hemolytic anemia, hypo- and aplastic anemia, alimentary anemia, postpartum hemoglobinuria, blood substitutes , drugs for stimulating hematopoiesis).

149. Acute parenchymatous hepatitis. Liver dystrophy (definition of the disease, causes, mechanisms of development, clinical symptoms, pathological changes, diagnostics and differential diagnostics, methods of treatment and prevention).

150. The concept of internal non-communicable pathology (description, goals and objectives, connection with other sciences, methodology for studying non-communicable diseases).

151. Methods of preventing liver dystrophy (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

152. Dyspepsia in calves (definition, causes, development, diagnostics and differential diagnostics, recommendations of the department's scientists for treatment).

153. Trichodesmatoxicosis (glycosides, trichodesmin, inkanin, N oxydinkanin, forms of liver and lung damage, early diagnosis and early treatment methods).

154. Pericarditis, hydropericardium, myocardial diseases (distribution and economic damage, classification and syndromes, prevention).

155. Diseases of the esophagus (obstruction, inflammation, spasm, narrowing, expansion, paralysis, Khokhlova zone).

156. Diseases of the respiratory system (diseases of the upper respiratory tract: rhinitis, laryngitis, bronchitis: description, causes, mechanisms of development, clinical symptoms, pathological changes, diagnosis and differential diagnosis, methods of treatment and prevention).

157. Bronchopneumonia, lobar pneumonia (definition of the disease, causes, mechanisms of development, clinical symptoms, pathological changes, diagnosis and differential diagnosis, methods of treatment and prevention).

158. Diseases of the urinary system (kidney diseases: nephritis, nephrosis, nephrosclerosis, pyelonephritis).

159. Metabolic disorders (types of metabolism in the animal body, the nature and causes of disorders, diseases that arise from disorders of protein, carbohydrate and fat metabolism: ketosis ).

161. Medical examination is the organizational basis of general prevention (stages, group preventive therapy, herd syndromes, cartograms, preventive stage, rational feeding). Bronchopneumonia of young animals (features of the respiratory

system, vitamin A, colds, hyperemia, lobular, lobar, lobar pneumonia, exudation, antibiotics).

162. Rules of antibiotic therapy (mechanisms of action of the main antibiotics, synergism, antagonism, relapse, candidiasis, dysbacteriosis, use of sulfonamides in treatment).

163. Hypovitaminosis (hypovitaminosis A, causes of retinol deficiency , clinical manifestations and prevention methods).

164. Pericarditis (definition, classification, traumatic, non-traumatic, dry, fibrinous, exudative, friction noise, fluid movement noise, cardiac puncture, symptomatic treatment, drugs for the effect on the heart).

165. Hemolytic anemia (causes, development, clinical manifestations, scientifically based diagnostics, methods of treatment and prevention, sodium, calcium chloride, ascorbic acid, glucose, iron, cobalt, copper preparations, vitamins C and B12, hemostimulin, phytin).

166. Treatment and prevention of bronchopneumonia (antibiotics, sulfonamides, physiotherapy, iodine).

167. Nephrosis (causes, development, clinical manifestations, scientifically based diagnostics, methods of treatment and prevention).

168. Alimentary anemia (causes, development, clinical manifestations, scientifically based diagnostics, methods of treatment and prevention, ferroglyukin-75, urzoferan-100, glucoferon, ferbitol, polyfer, impozil, hemodex, ferrumlek).

169. Hypo- and aplastic anemia (causes, development, clinical manifestations, scientifically based diagnostics, methods of treatment and prevention, iron glycerophosphate, lactate , sulfate, carbonate, copper sulfate, cobalt chloride, ferroglucin , folic acid).

170. Nephritis (causes, development, clinical manifestations, scientifically based diagnostics, methods of treatment and prevention).

171. Copper deficiency (copper, iron, storage salts, ceruloplasmin , cytochrome oxidase , copper sulfate, ferrous sulfate).

172. The main syndromes of diseases of the urinary system (diuresis, urination syndrome, heart and vascular syndrome, uremia, proteinuria, hematuria, hemoglobinuria, lasix, urotropin).

173. Enzootic diseases (biogeochemical provinces, mineral fertilizers, hypocobaltosis , hypocuprosis , endemic goiter, microelement salts).

174. Tympany of the scar (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

175. Diseases, mainly with protein and carbohydrate metabolism disorders (definition of ketosis , causes, mechanisms of development, clinical symptoms, pathological changes, diagnosis and differential diagnosis, treatment and prevention).

176. Diseases of the digestive system (stomatitis, pharyngitis, diseases of the esophagus: definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

177. Gastrointestinal colic ( obstructive , strangulation and thromboembolic iliac diseases , classification and syndromes of colic, their causes, development, diagnosis and differential diagnosis, treatment and prevention).

178. Anemia and hyperemia of the brain (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

179. Diseases of mineral metabolism disorders (alimentary, secondary and enzootic osteodystrophies: causes, development, clinical manifestations, pathological changes, diagnosis, treatment and prevention).

180. Hyperthermia (heat stroke) and hyperinsolation (sun stroke): definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

181. Hypovitaminosis of group B: B1, B2, B12 (causes, mechanisms of development, clinical manifestations, pathological changes, diagnosis and differential diagnosis, treatment and prevention).

182. Classification of diseases of the urinary system (kidney diseases, urinary tract diseases, chronic hematuria in cattle).

183. Classification of blood diseases and their syndromes (posthemorrhagic anemia, hemolytic anemia, hypo- and aplastic anemia, alimentary anemia, postpartum hemoglobinuria in cows, blood substitutes, agents that stimulate hematopoiesis).

184. Metabolic diseases in birds (hypovitaminosis, urate diathesis, apteriosis, perosis, cannibalism: definition, causes, mechanisms of development, clinical manifestations, pathological changes, diagnosis and differential diagnosis, treatment and prevention).

185. Alimentary osteodystrophy (definition, causes, clinical manifestations at different stages, treatment, 10% calcium chloride solution).

186. The main causes of rickets (definition, causes, development, clinical manifestations, scientifically based diagnostics, treatment and prevention).

187. Non-infectious diseases of birds (diseases of the digestive system: stomatitis, gastric obstruction, gastritis, cuticuliitis , jaundice, peritonitis, dyspepsia: definition, causes, mechanisms of development, clinical manifestations, pathological changes, diagnosis and differential diagnosis, treatment and prevention).

188. Hypocobaltosis (definition, anemia, cachexia, vitamin B12, diarrhea, cobalt, cyanocobalamin , cobalt chloride, copper sulfate).

189. Rhinitis (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

190. Endemic goiter (definition, causes, development, diagnosis and differential diagnosis, treatment and prevention).

191. The subject and objectives of epizootology.

192. What (biological, medical and veterinary) sciences is epizootology related to.

193. Scientists of our country who contributed to the development of epizootology and their works.

194. Measures to combat epizootics.

195. Infection, types of infection and infectious diseases.

196. Epizootic process and its driving forces. Epizootic focus, source of epizootic, mechanisms of spread.

197. Patterns of development of the epizootic process and stages of epizootics ( sporadic , epizootic, pandemic).

198. Rules for taking pathological material for laboratory research in infectious diseases and its dispatch.

199. Prevention of infectious diseases (general and special).

200. Methods of allergic research in infectious diseases.

201. Disinfection and its tasks. Types of disinfection, objects, methods, means.

202. Disinsection, deratization and their tasks. Objects, methods, means.

203. Organization of quarantine and restrictive measures in disadvantaged farms.

204. Prevention and control measures against anthrax.

205. Treatment and prevention of malignant edema.

206. Glanders and measures to combat it.

207. Bradzot in sheep, epizootology, general and special preventive measures.

208. Infectious enterotoxemia and measures to combat it.

209. Measures to improve farm health from tuberculosis.

210. Causal agents of brucellosis, clinical signs, pathogenesis, diagnostics and control measures.

211. Spread of foot-and-mouth disease and measures to combat it.

212. Epizootology of rabies and preventive measures.

213. Epizootology of Aujeszky's disease , differential diagnosis and control measures.

214. Epizootology of highly pathogenic avian influenza (HPAI), prevention and control measures.

215. Epizootology of swine influenza and preventive measures.

216. Prevention and control of equine influenza.

217. Pasteurellosis and measures to combat it.

218. Leptospirosis and measures to combat it.

219. Epizootology and diagnosis of listeriosis .

220. Treatment and measures to combat trichophytosis.

221. Clinical signs, epizootology and preventive measures of paratuberculosis

222. Methodology for conducting tuberculinization in tuberculosis.

223. Lumpy skin disease in cattle and its control measures.

224. Diagnosis and prevention of camel plague.

225. Allergic diagnosis of glanders in horses.

226. Rhinopneumonia and measures to combat it.

227. Diagnosis and prevention of erysipelas in pigs.

228. Salmonellosis in young animals and measures to combat it.

229. Colibacteriosis in young animals and measures to combat it.

230. Pathological changes and clinical signs in laryngotracheitis in birds.

231. Enterobacteriosis of birds and measures to combat it.

232. Epizootology and diagnostics of canine distemper.

233. Measures taken against brucellosis.

234. Epizootology, pathogenesis and special preventive measures for smallpox.

235. Diagnosis and prevention of botulism.

236. Concepts of pathogenicity and virulence.

237. Treatment and prevention of necrobacteriosis .

238. Insulators, their structure and the requirements placed on them.

239. Infectious bronchitis and measures to combat it.

240. Epizootology and prevention of respiratory mycoplasmosis.

241. The concept of veterinary toxicology, the purpose and objectives of the discipline (what is poison, what parts does toxicology consist of, the difference between poison and medicinal substances, the causes of poisoning).

242. Ways of poisons entering the body, causes and their harmful effects on the body (primary changes after the poison enters the body and the state of the body).

243. Antidote therapy for poisoning (organic compounds, carbamates and nitrates).

244. Classification of toxic substances according to L. I. Medved and other authors (what parts it consists of, methods for determining LD50).

245. Poisoning with organophosphorus compounds (mechanism of action, causes, pathogenesis, clinical signs and treatment).

246. Poisoning with organochlorine compounds (mechanism of action, causes, pathogenesis, clinical signs and treatment).

247. Nitrate and nitrite poisoning (causes, mechanism of action, clinical signs and treatment).

248. The concept of synthetic pyrethroids (pathogenesis, symptoms and pathological changes in poisoning).

249. Pharmacological agents used to treat and eliminate the consequences of pyrethroid poisoning .

250. Poisoning with mineral poisons (poisoning with copper compounds, causes, clinical signs, treatment and prevention).

251. Fluoride poisoning (causes, clinical signs, pathological changes, treatment and prevention).

252. Herbicide poisoning (routes of entry into the body, clinical signs, pathological changes, treatment and prevention).

253. Poisoning by industrial waste (reasons for entry into the body, clinical signs, pathological changes, treatment and prevention).

254. Classification of plants containing glycosides, poisoning by them (clinical signs, pathological changes, treatment and prevention).

255. Poisoning with toxins of animal origin (causes, clinical signs, pathological changes, treatment and prevention).

256. Snake venom poisoning (causes, clinical signs, pathological changes, treatment and prevention).

257. Carbamate poisoning (causes, clinical signs, pathological changes, treatment and prevention).

258. Poisoning with urea compounds (causes, clinical signs, diagnosis, treatment and prevention).

259. Toxicology of zoocides (causes, clinical signs, diagnosis, treatment and prevention).

260. Toxicodynamics of toxic substances in the body of animals.

261. The history of the development of parasitology, its connection with biology, medicine and veterinary sciences ( zooparasitology , medical parasitology, phytoparasitology ).

262. Methods of diagnosing helminthiasis (epizootological, clinical, pathological and helminthological studies).

263. Methods of helminthoscopy (sequential washing, Fulleborn and Darling methods).

264. Fascioliasis (morphology, biology of pathogens, intermediate hosts, diagnostics, treatment and prevention).

265. Paramphistomiasis (morphology, biology of the pathogen, clinical signs, treatment and preventive measures).

266. Dicrocoeliosis (primary, intermediate and additional hosts, treatment and preventive measures).

267. Bovine cysticercosis (distribution, biology, treatment and preventive measures).

268. Echinococcosis (pathogen, pathogenesis, clinical signs, preventive measures).

269. Coenurosis (pathogen, epizootology, clinical signs, preventive measures).

270. Measures to combat and prevent echinococcosis and coenurosis.

271. Monieziosis of sheep and goats (pathogens, biology, clinical signs, diagnosis, treatment and prevention methods).

272. Thysanieziosis and avitellinosis of sheep (pathogens, diagnostics, treatment and prevention methods).

273. Anocepaloidosis (clinical signs, treatment and preventive measures).

274. Ascariasis in pigs (pathogen, biology, treatment and preventive measures).

275. Parascariosis (pathogen, distribution, treatment and prevention).

276. Ascariasis and toxocariasis of carnivores (morphology, biology, treatment and preventive measures).

277. Provide a definition of equine oxyurosis (characteristic signs, treatment and prevention methods).

278. Gastrointestinal strongylosis of horses (pathogens, distribution, treatment and prevention).

279. Gastrointestinal strongylosis of ruminants (pathogens, distribution, treatment and prevention).

280. Marshalliasis (pathogen, biology, diagnostics, treatment and prevention).

281. Hemonchosis of sheep (pathogen, biological development, treatment and prevention).

282. Chabertiosis of sheep (pathogen, biology, diagnostics, treatment and prevention).

283. Dictyocaulosis of sheep and goats (pathogen, biology, treatment and prevention).

284. Trichuriasis of sheep (pathogen, biology, diagnostics, treatment and prevention).

285. Thelaziosis of cattle (pathogen, biology, diagnostics, treatment and prevention).

286. Bovine piroplasmosis, structure and biology of the pathogen, information about carriers.

287. Theileriosis of cattle (pathogen, biology, diagnostics, treatment and prevention methods).

288. Provide a definition of ticks that spread theileriosis and piroplasmosis (differences between types of ticks, control measures).

289. Equine piroplasmosis (clinical signs, diagnosis, treatment and prevention methods).

290. Eimeriosis in animals (clinical signs, diagnosis, treatment and prevention methods).

291. Trypanosomiasis (pathogen, biology, diagnostics, treatment and prevention methods).

292. Trichomoniasis of cattle (pathogen, diagnosis, treatment and prevention).

293. Provide a definition of acariform and parasitiform mites (main representatives, diseases caused).

294. Psoroptosis in animals (pathogen, diagnosis, treatment and prevention).

295. chorioptosis (pathogen, diagnosis, treatment and prevention).

296. Demodicosis in dogs (pathogen, diagnosis, treatment and prevention).

297. Hypodermatosis of cattle (pathogen, biology, diagnostics, treatment and prevention methods).

298. estrosis (pathogen, biology, diagnostics, treatment and prevention methods).

299. Equine gastrophilosis (pathogen, biology, diagnostics, treatment and prevention methods).

300. Blood-sucking insects (horseflies, midges, culecoids, siphunculatosis, mallophagosis ) and the diseases they cause.

**Dean of the Faculty of Veterinary Medicine prevention and treatment, associate professor** **Sh.Kurbanov**