

LIST OF CONTROL EXAMINATION QUESTIONS

1. Etiology, epidemiology, and transmission routes of typhoid fever and paratyphoid fevers A and B.
2. Pathogenesis of typhoid fever and paratyphoid fevers A and B: stages, immune and morphological changes.
3. Clinical characteristics of typhoid fever: leading symptoms, phases of the disease course.
4. Clinical features of paratyphoid fevers A and B. Comparison with typhoid fever.
5. Complications of typhoid fever: clinical manifestations.
6. Complications of typhoid fever: diagnosis, emergency care.
7. Principles of diagnosis of typhoid fever and paratyphoid fevers: laboratory and instrumental methods.
8. Current approaches to etiotropic and pathogenetic treatment of typhoid fever and paratyphoid fevers.
9. Epidemiological significance of bacterial carriage in typhoid fever. Management of carriers. Prevention of typhoid fever and paratyphoid fevers.
10. Differential diagnosis of typhoid fever with malaria, sepsis, hepatitis, tuberculosis, and acute respiratory viral infections (ARVI).
11. Etiology and epidemiology of amoebiasis. Life cycle of the pathogen and pathogenesis of amoebiasis.
12. Clinical forms of amoebiasis.
13. Clinical picture of amoebic colitis: leading symptoms, course, complications.
14. Extraintestinal amoebiasis: symptoms, diagnosis, possible complications.
15. Methods of laboratory diagnosis of amoebiasis: microscopy, ELISA, PCR, serological tests.

16. Treatment of amoebiasis: drugs, therapy regimens for intestinal and extraintestinal forms. Prevention and sanitary-hygienic measures for amoebiasis.
17. Differential diagnosis of amoebiasis with other intestinal infections (shigellosis, giardiasis, ulcerative colitis (UC), etc.).
18. Epidemiology of giardiasis. Clinical forms and symptoms of giardiasis in adults and children.
19. Diagnosis of giardiasis: methods for detecting cysts, antigens, PCR. Differential diagnosis.
20. Complications, principles of treatment and prevention of giardiasis.
21. Etiology and epidemiology of botulism: properties of *Clostridium botulinum*, types of toxins. Pathogenesis of botulism.
22. Classification of botulism. Main clinical forms.
23. Clinical picture of botulism: leading symptoms, stages of the disease.
24. Complications of botulism.
25. Differential diagnosis of botulism with stroke, myasthenia gravis, Guillain-Barré syndrome.
26. Methods of laboratory diagnosis: bioassay, PCR, ELISA, botulinum toxin detection.
27. Treatment strategy: antitoxic serum, supportive and symptomatic therapy for botulism. Prevention of botulism: sanitary-hygienic measures, control of canning.
28. Etiology of foodborne toxic infections (FTI): main bacterial pathogens (*S. aureus, B. cereus, Cl. perfringens*, etc.). Epidemiology of FTI. Conditions for mass outbreaks.
29. Clinical forms and features of FTI symptoms depending on the pathogen. Complications.
30. Principles of diagnosis: bacteriological examination of food products and biomaterial, interviewing affected individuals. Differential diagnosis.

31. Treatment. Prevention of FTI.
32. Etiology and epidemiology of salmonellosis. Pathogenesis of salmonellosis: features of invasion, toxicoinfection, development of bacteremia.
33. Classification of clinical forms of salmonellosis. Clinical picture of the gastrointestinal form of salmonellosis.
34. Comparative characteristics of the clinical picture of generalized forms of salmonellosis, complications.
35. Salmonellosis and its role as a nosocomial infection. Features of antibacterial therapy.
36. Methods of laboratory diagnosis of salmonellosis: bacteriological, serological, PCR.
37. Differential diagnosis of salmonellosis with FTI, shigellosis, cholera, etc.
38. Principles of treatment of salmonellosis: indications for hospitalization, etiotropic and pathogenetic therapy. Prevention of salmonellosis: sanitary control, supervision of food enterprises, disinfection.
39. Etiology and epidemiology of shigellosis (dysentery). Pathogenesis of shigellosis: invasion of the intestinal mucosa, inflammation, toxicosis.
40. Classification of shigellosis: acute and chronic forms, severity grades, course. Clinical picture of shigellosis.
41. Complications of shigellosis: perforations, toxic megacolon, etc. Management of complications.
42. Methods of diagnosis of shigellosis: bacteriological culture, serological tests, PCR.
43. Differential diagnosis of shigellosis with amoebiasis, UC, salmonellosis, giardiasis.
44. Treatment strategy for shigellosis: antibacterial therapy, rehydration, probiotics, diet. Anti-epidemic measures and prevention of shigellosis: focal sanitation, hygiene, health education.

45. Epidemiology of cholera: source of infection, mechanisms and transmission routes, conditions for epidemic spread.
46. Pathogenesis of cholera: mechanism of action of cholera toxin, development of watery diarrhea, dehydration.
47. Classification of cholera by severity and clinical course.
48. Clinical manifestations of cholera.
49. Complications of cholera: hypovolemic shock, acute kidney injury (AKI), electrolyte disturbances.
50. Methods of laboratory diagnosis of cholera.
51. Differential diagnosis of cholera.
52. Principles of treatment of cholera: immediate rehydration therapy, antibacterial drugs, monitoring.
53. Prevention of cholera: sanitary-hygienic measures, epidemiological surveillance, vaccine prophylaxis.
54. Describe the life cycle of *Ascaris lumbricoides* and routes of human infection. What clinical manifestations are characteristic of the migratory and intestinal phases of ascariasis? Methods of diagnosis of ascariasis. Principles of treatment and prevention.
55. Indicate the transmission route of enterobiasis and the epidemiological features of the disease. What symptoms are characteristic of enterobiasis in children and adults?
56. Diagnosis of enterobiasis (Graham's method / Scotch tape test). Treatment and prevention measures in organized groups.
57. Describe the life cycle of *Trichuris trichiura* (whipworm) and routes of infection. What symptoms are observed in mild and severe trichuriasis?
58. How is diagnosis and treatment of trichuriasis performed? Preventive measures.

59. Life cycle of *Taenia saginata* (beef tapeworm). Routes of human infection with taeniasis saginata. Clinical signs of taeniasis saginata. Diagnosis and treatment of taeniasis saginata. Prevention measures in endemic areas.
60. Clinical features of taeniasis solium and cysticercosis (neurocysticercosis, etc.). Methods of diagnosis and treatment. Prevention of the spread of *Taenia solium* (pork tapeworm).
61. Life cycle of *Diphyllobothrium latum* (broad fish tapeworm) and route of human infection. What symptoms does diphyllbothriasis cause? Role of vitamin B₁₂. Diagnosis, treatment and prevention of diphyllbothriasis.
62. Clinical forms of fascioliasis: acute and chronic, symptoms of liver involvement. Methods of diagnosis (serology, egg detection), treatment and prevention of fascioliasis.
63. Life cycle of the cat liver fluke (*Opisthorchis felinus*). Role of intermediate and definitive hosts.
64. Clinical picture: acute and chronic opisthorchiasis, involvement of the liver and pancreas.
65. Diagnosis (eggs in feces/duodenal contents), treatment and prevention of opisthorchiasis.
66. Main principles of differential diagnosis of helminthiases and intestinal infections.
67. General principles of diagnosis, treatment and prevention of helminthiases.
68. Epidemiology and pathogenesis of viral hepatitis A.
69. Clinical picture and complications of viral hepatitis A.
70. Methods of laboratory and differential diagnosis of hepatitis A.
71. Treatment and prevention of hepatitis A.
72. Epidemiology and pathogenesis of viral hepatitis E.
73. Clinical course and complications of hepatitis E, features of the course in pregnant women.
74. Laboratory and differential diagnosis of hepatitis E.

75. Treatment and prevention of hepatitis E, role of sanitary-hygienic measures.
76. Structure and genome of hepatitis B virus, features of the life cycle, epidemiological features of the infection.
77. Pathogenesis of viral hepatitis B.
78. Clinical picture of acute viral hepatitis B.
79. Clinical picture and complications of chronic hepatitis B.
80. Laboratory methods of diagnosis of hepatitis B.
81. Differential diagnosis of hepatitis B.
82. Treatment of viral hepatitis B.
83. Vaccine prophylaxis, current treatment regimens and prevention measures for hepatitis B.
84. Epidemiology and pathogenesis of hepatitis C.
85. Clinical manifestations, forms of hepatitis C, complications.
86. Diagnosis of hepatitis C.
87. Current approaches to the treatment of hepatitis C, new antiviral drugs.
88. Prevention of hepatitis C.
89. Differential diagnosis of viral hepatitis with other liver pathologies.
90. Structure of hepatitis D virus and features of its dependence on hepatitis B virus. Transmission routes and epidemiological features of HDV infection.
91. Pathogenesis of hepatitis D.
92. Clinical manifestations: coinfection and superinfection of HDV on the background of HBV.
93. Laboratory and differential diagnosis of hepatitis D.
94. Treatment and prevention of hepatitis D.
95. Epidemiology of HIV infection.
96. Describe the pathogenesis of HIV infection and the mechanism of immune system damage.
97. Stages of HIV infection course. Clinical manifestations of acute HIV infection and methods of its diagnosis.

98. Clinical manifestations of HIV infection (at the AIDS stage) and methods of its diagnosis.
99. Describe the immunological changes occurring in the body during HIV infection.
100. Which opportunistic infections are most characteristic of patients with HIV?
101. Role of viral load and CD4 cell count in HIV infection monitoring. Methods of laboratory diagnosis of HIV infection: serological tests, PCR, immunoblotting.
102. Main principles of antiretroviral therapy (ART), goals and stages of treatment. Side effects and complications of antiretroviral therapy.
103. Prevention of HIV infection.
104. Pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) for HIV infection.
105. Clinical manifestations of cytomegalovirus (CMV) infection.
106. Diagnosis of CMV infection: serological methods and molecular tests. Principles of treatment and prevention of cytomegalovirus infection.
107. Transmission routes of Epstein-Barr virus (EBV) and its role in the development of infectious mononucleosis. Clinical picture of infectious mononucleosis and other EBV-associated diseases.
108. Methods of laboratory and differential diagnosis of EBV infection.
109. Treatment and prevention of infectious mononucleosis.
110. Transmission routes of herpes simplex virus type 1 (HSV-1) and features of clinical manifestations. Mechanisms of latent infection and reactivation of HSV-1. Methods of diagnosis of HSV-1 infection. Treatment.
111. Diagnosis of HSV-2: laboratory methods and clinical features. Features of the course and complications of HSV-2 infection. Current approaches to the treatment and prevention of HSV-2.
112. Clinical symptoms and treatment of adenovirus infection.

113. Clinical course and treatment of rhinovirus infection.
114. Epidemiology and pathogenesis of influenza.
115. Clinical picture of influenza, complications.
116. Laboratory and differential diagnosis of influenza.
117. Treatment and prevention of influenza.
118. Epidemiology and pathogenesis of COVID-19.
119. Clinical manifestations of COVID-19, classification of disease severity.
120. Laboratory diagnosis of COVID-19: PCR, antigen tests, serology.
121. Current approaches to the treatment and prevention of COVID-19, including vaccine prophylaxis.
122. Clinical picture of parainfluenza, complications and differential diagnosis, and therapy.
123. Epidemiology of meningococcal infection: seasonality, prevalence and risk groups.
124. Pathogenesis of meningococcal infection, mechanisms of development of meningitis and meningococemia. Classification of clinical forms.
125. Clinical picture of meningococcal meningitis and meningoenzephalitis.
126. Clinical picture of meningococemia.
127. Clinical picture of the localized form of meningococcal infection.
128. Diagnosis of meningococcal infection: methods of laboratory confirmation.
129. Differential diagnosis of generalized forms of meningococcal infection.
130. Complications of meningococcal infection.
131. Principles of treatment of meningococcal infection, indications for antibiotic use.
132. Prevention of meningococcal infection.
133. Epidemiology and pathogenesis of measles in adults.
134. Clinical features of the course of measles in adults compared to children. Typical and atypical complications of measles in adults.

135. Clinical features of the course of rubella in adults compared to children. Typical and atypical complications of rubella in adults.
136. Diagnosis of measles: clinical and laboratory methods. Principles of treatment and prevention of measles in adults.
137. Diagnosis of rubella: clinical and laboratory methods. Principles of treatment and prevention of rubella in adults.
138. Clinical manifestations of chickenpox (varicella) in adults and typical complications. Diagnostic methods for suspected chickenpox in adults.
139. Features of the course of rubella, measles and chickenpox in pregnant women, prevention of congenital infection.
140. Clinical picture of mumps (epidemic parotitis) in adults and possible complications.
141. Diagnosis of mumps. Treatment and prevention of mumps.
142. Etiology and epidemiology of erysipelas. Pathogenesis of erysipelas.
143. Clinical picture, forms and stages of development of erysipelas.
144. Diagnosis of erysipelas and differential diagnosis.
145. Principles of treatment and prevention of erysipelas.
146. Main viruses causing hemorrhagic fevers. Pathogenesis of hemorrhagic fevers.
147. Clinical manifestations and course of Lassa fever. Diagnosis and methods of prevention of Lassa fever.
148. Causative agent and transmission routes of Dengue virus. Clinical forms of Dengue and main symptoms.
149. Clinical picture and features of the course of Ebola hemorrhagic fever. Diagnosis, treatment and prevention measures for Ebola virus.
150. Clinical picture, diagnosis and main prevention measures for Marburg fever.
151. Etiology and epidemiological features of Crimean-Congo hemorrhagic fever (CCHF): characteristics of the virus and its properties.

152. Clinical picture of Crimean-Congo hemorrhagic fever: stages, symptoms and complications.
153. Methods of diagnosis of CCHF: laboratory and serological studies.
154. Differential diagnosis of CCHF.
155. Principles of treatment and prevention of Crimean-Congo hemorrhagic fever.
156. Etiology and epidemiology of anthrax. Pathogenesis of disease development in different forms of anthrax.
157. Clinical forms of anthrax: cutaneous, pulmonary, intestinal, septic.
158. Clinical picture and course of the cutaneous form of anthrax.
159. Clinical picture and course of the pulmonary form of anthrax.
160. Diagnosis of anthrax: laboratory methods, cultural and serological diagnosis. Differential diagnosis of anthrax with other infections.
161. Principles of treatment of anthrax. Prevention of anthrax.
162. Etiology and epidemiology of brucellosis. Pathogenesis of brucellosis and features of the immune response.
163. Clinical picture of brucellosis: acute, subacute and chronic forms.
164. Diagnosis of brucellosis. Differential diagnosis of brucellosis.
165. Treatment of brucellosis.
166. Prevention of brucellosis.
167. Etiology and epidemiology of rabies. Pathogenesis of rabies: mechanism of entry and spread of the virus in the body.
168. Clinical picture of rabies: forms and stages of the disease. Diagnosis of rabies: clinical and laboratory methods.
169. Differential diagnosis of rabies.
170. Treatment of rabies: current approaches and therapeutic challenges.
171. Prevention of rabies: vaccination and post-exposure prophylaxis measures after a bite.
172. Pathogenesis of tetanus: action of tetanospasmin on the nervous system.

173. Routes of tetanus infection and risk factors.
174. Clinical picture of tetanus: symptoms, stages and complications.
175. Diagnosis of tetanus: main criteria and differential diagnosis.
176. Treatment of tetanus: antitoxic therapy, antibiotics and supportive care.
177. Prevention of tetanus: vaccination and wound management.
178. Epidemiology of Lyme disease. Main vectors of borreliosis and their role in the epidemiological process.
179. Pathogenesis of borreliosis: mechanism of infection and spread of the infection in the body.
180. Clinical stages of Lyme disease and characteristic symptoms at each stage.
181. Main cutaneous manifestations of Lyme disease.
182. Extracutaneous forms of Lyme disease: involvement of the nervous system, joints, and heart.
183. Methods of diagnosis of borreliosis: serological tests, PCR, cultural studies.
184. Current approaches to the treatment of Lyme disease: antibiotic therapy and supportive therapy. Prevention measures for borreliosis.
185. Transmission routes of malaria and epidemiological features of the disease. Life cycle of *Plasmodium* in the human body and the mosquito vector.
186. Pathogenesis of malaria and causes of anemia development.
187. Clinical picture of various forms of malaria (vivax, quartan, tropical).
188. Diagnosis of malaria: microscopy, rapid tests and PCR.
189. Differential diagnosis of malaria.
190. Treatment of malaria: first-line drugs and resistance.
191. Features of the clinical course of malaria in children and pregnant women.
192. Prevention of malaria: chemoprophylaxis and mosquito control measures.
193. Importance of early detection and specific therapy in severe forms of malaria.

194. Epidemiological features of visceral leishmaniasis: geography, foci, risk groups.
195. Pathogenesis of visceral leishmaniasis: interaction of the parasite with the host immune system.
196. Clinical picture of visceral leishmaniasis: initial and late symptoms.
197. Laboratory diagnosis of visceral leishmaniasis. Role of bone marrow and spleen biopsy in the diagnosis of visceral leishmaniasis.
198. Differential diagnosis of visceral leishmaniasis with other infections and hematological diseases.
199. Current methods of treatment of visceral leishmaniasis: first-line drugs and reserve agents. Side effects and complications of therapy for visceral leishmaniasis.
200. Prognosis of visceral leishmaniasis and factors influencing disease outcome. Prevention of visceral leishmaniasis.