

Approved
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CLINICAL PHARMACOLOGY EXAM QUESTIONS
FOR 6th COURSE STUDENTS
for specialty 1-79 01 01 "General Medicine"
2026-2027 academic year

1. Goals and objectives of clinical pharmacology. Clinical pharmacology as the basis for rational pharmacotherapy.
2. Principles of rational pharmacotherapy. The main types of pharmacotherapy: etiotropic, pathogenetic, symptomatic.
3. Nomenclature of medicines: international non-proprietary and trade names. Original and generic drugs.
4. Clinical aspects of drug pharmacokinetics: key pharmacokinetic parameters (elimination half-life, bioavailability, volume of distribution, total clearance) and their application in the individualized selection of drugs and dosages to ensure effective and safe treatment. Drug safety parameters: minimum therapeutic concentration, therapeutic range, therapeutic index.
5. Clinical pharmacodynamics of drugs. Targets of drugs: receptors, cytoplasmic ion channels, nonspecific proteins and lipids of the cytoplasmic membrane, enzymes.
6. Clinical pharmacodynamics of drugs: mechanism of action, pharmacodynamic effects of drugs.
7. Types of equivalence of medicines. Principles for the study of bioequivalence of generic drugs.
8. Drug interactions: types, mechanisms, clinical significance.
9. Clinical trials of medicines. Phases and types of clinical trials of drugs.
10. State registration of medicines.
11. The main provisions of evidence-based medicine, the concept of personalized drugs.
12. Features of the use of drugs in elderly patients.
13. Features of the use of drugs in patients with liver and kidney disease.
14. Features of the use of drugs in women during pregnancy and lactation.
15. Medicines of prescription and non-prescription dispensing. The procedure and rules for prescribing a doctor's prescription for drugs, including psychotropic and narcotic drugs.
16. Classification of unwanted (side) drug reactions. Prediction and prevention of unwanted (side) reactions. Identification and registration of unwanted (side) drug reactions. Notification of an identified (suspected) adverse reaction to a medicinal product.
17. Anaphylaxis, drug anaphylactic shock: pathogenesis, clinical manifestations, diagnosis. Anaphylaxis, drug-induced anaphylactic shock: emergency medical care. Prevention of drug anaphylactic shock.
18. Classification and clinical and pharmacological characteristics of H1-histamine blockers.
19. Classification, clinical and pharmacological characteristics of penicillins

20. Classification, clinical and pharmacological characteristics of cephalosporins.
21. Classification, clinical and pharmacological characteristics of carbapenems
22. Classification, clinical and pharmacological characteristics of macrolides.
23. Classification, clinical and pharmacological characteristics of aminoglycosides.
24. Classification, clinical and pharmacological characteristics of glycopeptides.
25. Classification, clinical and pharmacological characteristics of oxazolidinones.
26. Classification, clinical and pharmacological characteristics of tetracyclines.
27. Classification, clinical and pharmacological characteristics of nitroimidazoles.
28. Classification, clinical and pharmacological characteristics of fluoroquinolones.
29. Classification, clinical and pharmacological characteristics of fosfomycins
30. Classification, clinical and pharmacological characteristics of lincosamides
31. Classification, clinical and pharmacological characteristics of polymyxins
32. Classification, clinical and pharmacological characteristics of sulfonamides
33. Classification, clinical and pharmacological characteristics of rifamycin
34. The tactics of choosing antimicrobial drugs for the treatment of infectious and inflammatory diseases, taking into account the age characteristics of the patient, previous antibiotic therapy, the nature of the disease, the presence of concomitant diseases.
35. Antibiotic resistance of bacterial pathogens when using antimicrobial drugs, the reasons for the formation, ways of overcoming and prevention.
36. Principles of rational antibiotic therapy. Combined antibiotic therapy. Monitoring the effectiveness and safety of antimicrobial therapy.
37. Classification and clinical and pharmacological characteristics of antiherpetic drugs.
38. Classification, clinical and pharmacological characteristics of anti-influenza drugs.
39. Principles of treatment of acute respiratory viral infections, features of treatment of coronavirus infection COVID-19.
40. Clinical and pharmacological characteristics of drugs used to treat viral hepatitis B and C.
41. Classification, clinical and pharmacological characteristics of antifungal drugs.
42. Classification, clinical and pharmacological characteristics antiparasitic drugs.
43. Classification, clinical and pharmacological characteristics of antiprotozoal drugs
44. Classification, clinical and pharmacological characteristics anthelmintic drugs
45. Classification, clinical and pharmacological characteristics of glucocorticoids.
46. Classification, clinical and pharmacological characteristics of non-steroidal anti-inflammatory drugs.
47. Classification, clinical and pharmacological characteristics of antitussive drugs.
48. Classification, clinical and pharmacological characteristics of expectorant and mucolytic drugs, especially their use.
49. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (beta-2-adrenomimetics)
50. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (M-anticholinergics)
51. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (methylxanthines)
52. Classification, pharmacological characteristics of drugs used for basic anti-inflammatory therapy of bronchial asthma (inhaled glucocorticoids, leukotriene receptor blockers, mast cell membrane stabilizers).
53. Classification, clinical and pharmacological characteristics of ACE inhibitors.

54. Classification, clinical and pharmacological characteristics of angiotensin II receptor antagonists (sartans)
55. Classification, clinical and pharmacological characteristics of slow calcium channel blockers
56. Classification, clinical and pharmacological characteristics of β -blockers
57. Classification, clinical and pharmacological characteristics of diuretics.
58. Classification, clinical and pharmacological characteristics of imidazoline receptor agonists.
59. Classification, clinical and pharmacological characteristics of nitrates and nitrate-like drugs
60. Classification, clinical and pharmacological characteristics of lipid-lowering drugs (statins and fibrates).
61. Clinical and pharmacological characteristics of class I antiarrhythmic drugs.
62. Clinical and pharmacological characteristics of class III antiarrhythmic drugs
63. Classification, clinical and pharmacological characteristics of antisecretory drugs (proton pump inhibitors, H₂-histamine blockers)
64. Classification, clinical and pharmacological characteristics of antacids and gastroprotectors
65. Classification, clinical and pharmacological characteristics of laxatives
66. Clinical and pharmacological characteristics of drugs used in the schemes of eradication of *Helicobacter pylori*.
67. Classification, clinical and pharmacological characteristics of antiemetic drugs
68. Classification, clinical and pharmacological characteristics of drugs that affect the motor function of the gastrointestinal tract.
69. Classification, clinical and pharmacological characteristics of substitution therapy drugs for pancreatic pathology
70. Classification, clinical and pharmacological characteristics of choleretic drugs and hepatoprotectors
71. Classification, clinical and pharmacological characteristics of antidiarrheal drugs
72. Classification, clinical and pharmacological characteristics of drugs that regulate intestinal biocenosis.
73. Classification, clinical and pharmacological characteristics of platelet aggregation inhibitors
74. Classification, clinical and pharmacological characteristics of direct anticoagulants
75. Classification and clinical-pharmacological characteristics of direct oral anticoagulants
76. Classification and clinical-pharmacological characteristics of direct parenteral anticoagulants
77. Classification and clinical-pharmacological characteristics of indirect anticoagulants
76. Classification, clinical and pharmacological characteristics of thrombolytics
78. Classification, clinical and pharmacological characteristics of hemostatic drugs.
79. Classification, clinical and pharmacological characteristics of fibrinolytics
80. Clinical and pharmacological characteristics of drugs for the treatment of iron deficiency anemia.
81. Clinical and pharmacological characteristics of antianemic drugs (cyanocobalamin, folic acid).
82. Classification, clinical and pharmacological characteristics of drugs used to treat type 2 diabetes mellitus (sulfonylurea derivatives).

83. Classification, clinical and pharmacological characteristics of drugs used to treat type 2 diabetes mellitus (meglitinides, thiazolidinediones, incretins).
84. Classification, clinical and pharmacological characteristics of insulins.
85. Classification, clinical pharmacology of drugs used to treat hypothyroidism (levothyroxine, iodine preparations).
86. Classification, clinical pharmacology of drugs used to treat hyperthyroidism (antithyroid drugs).
87. Classification and clinical-pharmacological characteristics of antipsychotics
88. Classification and clinical-pharmacological characteristics of hypnotic drugs
89. Classification and clinical-pharmacological characteristics of antidepressants
90. Classification and clinical-pharmacological characteristics of antiepileptic drugs
91. Classification and clinical-pharmacological characteristics of disease-modifying anti-inflammatory drugs
92. Classification and clinical-pharmacological characteristics of drugs for the treatment of pulmonary arterial hypertension
93. Classification and clinical-pharmacological characteristics of drugs affecting metabolism
94. Clinical-pharmacological characteristics of drugs for pain management: Opioid analgesics
95. Clinical-pharmacological characteristics of drugs for the treatment of neuropathic pain
96. Antibiotic therapy for patients with abdominal infections
97. Pharmacotherapy for acute asthma attacks
98. Pharmacotherapy for uncomplicated and complicated hypertensive crises
99. Assessment of drug interaction risk
100. Antibiotic therapy for patients with skin and soft tissue infections
101. Antibiotic therapy for patients with urinary tract infections
102. Antibiotic therapy for patients with primary intravascular infections (including catheter-associated infections)
103. Antibiotic therapy for patients with community-acquired pneumonia
104. Antibiotic therapy for sepsis
105. Antibiotic therapy for patients with hospital-acquired pneumonia
106. Assessment of liver and kidney function in relation to the selection and safety evaluation of pharmacotherapy