

STATE EXAM – PHARMACOLOGY AND TOXICOLOGY

1. Pharmacodynamics – receptors, agonists and antagonists. Drug targets.
2. Pharmacokinetics: routes of administration, absorption and distribution.
3. Pharmacokinetics: drug elimination - metabolism and excretion. Bioequivalence.
4. Factors affecting pharmacological and toxicological effects of the drugs.
5. Anxyolitics, sedative-hypnotics and antipsychotics.
6. Antidepressants, psychostimulators and nootropics.
7. Antiepileptics and drugs for the treatment of neurodegenerative diseases.
8. Antiasthmatic and other drugs acting on respiratory system
9. Pharmacology of allergy - antagonists of H1 receptors and glucocorticosteroids.
10. Pharmacology of inflammation and pain –NSAIDs, opioid analgesics and glucocorticosteroids.
11. Drugs acting on gastro-intestinal tract – antiulcer, antiemetic, laxative and antidiarrheic drugs.
12. Drugs acting on hemopoiesis, coagulation, platelet aggregation and fibrinolysis..
13. Inotropics, sympathomimetics, cardiac glycosides, phosphodiesterase inhibitors.
14. Antihypertensive drugs and diuretics.
15. Antiarrhythmics and antianginal drugs.
16. Antihyperlipidemia drugs and hepatoprotectors.
17. Drugs acting on thyroid gland. Drugs for the treatment of osteoporosis.
18. Antidiabetic drugs.
19. Reproductive system: sex hormones and drugs acting as antihormones. Contraceptives and drugs for the treatment of erectile dysfunction.
20. Beta-lactam and glycopeptide antibiotics.
21. Aminoglycosides, tetracyclines, macrolides, lincosamides. Antimycobacterial agents.
22. Sulfonamides, trimethoprim, and fluoroquinolones. Antimycotic agents.
23. Drugs for the treatment of cancer.
24. Antiviral drugs and immunomodulators.
25. Drug interactions and drug resistance.
26. Adverse drug effects: types and mechanisms.
27. Drug abuse and drug dependence. Toxicomanias. Withdrawal syndrome.
28. General principles in the treatment of acute intoxication. Antidotes.
29. Toxicology of arsenic, heavy metals, pesticides.
30. Toxicology of toxic gases, alcohol and organic solvents.

