

**Questionnaire  
in**

**TOXICOLOGY FOR FOREIGN LANGUAGE STUDENTS**

1. TOXICOLOGY – AN INTRODUCTION, HISTORICAL ASPECTS, DEFINITION AND TERMINOLOGY. TOXIC SUBSTANCES – CLASSIFICATION.
2. EXPERIMENTAL TOXICOLOGY – METHODS IN EXPERIMENTAL TOXICOLOGY, GOOD LABORATORY PRACTICE IN TOXICOLOGICAL EXPERIMENTS
3. TOXICOLOGY – GENERAL CONCEPTS. EXPOSITION-EFFECT RELATIONSHIP. FACTORS AFFECTING EXPOSITION. BIOMARKERS – EVALUATION AND SIGNIFICANCE
4. QUANTITATIVE PARAMETERS OF TOXICITY – TOXICOMETRY PARAMETERS. DOSES. DOSE-RESPONSE RELATIONSHIP.
5. TOXICOKINETICS – ABSORPTION, DISTRIBUTION AND ELIMINATION OF TOXIC SUBSTANCES
6. TOXICODYNAMICS. CELLULAR AND MOLECULAR MECHANISMS OF THE TOXIC EFFECT. STRUCTURE-TOXIC ACTIVITY RELATIONSHIP.
7. BIOTRANSFORMATION – SIGNIFICANCE, FUNCTIONS, PHASES. HEPATIC AND EXTRAHEPATIC BIOTRANSFORMATION
8. PHASE I BIOTRANSFORMATION PROCESSES (ENZYMES, SUSTRATES)
9. PHASE II BIOTRANSFORMATION PROCESSES (ENZYMES, SUSTRATES)
10. CELLULAR AND MOLECULAR MECHANISMS OF THE OXIDATIVE METABOLISM – THE CYTOCHROME P450 SYSTEM – STRUCTURE, FUNCTION, ISO-ENZYMES
11. BIOACTIVATION AND DETOXIFICATION PROCESSES (I AND II PHASES OF BIOTRANSFORMATION) – MECHANISMS AND IMPORTANCE
12. ENDOGENIC FACTORS AFFECTING BIOTRANSFORMATION – AGE, GENDER, DISEASE. GENETICALLY DETERMINED DIFFERENCES IN DRUG BIOTRANSFORMATION – CLINICAL SIGNIFICANCE
13. EXOGENIC FACTORS AFFECTING BIOTRANSFORMATION – FOOD, ALCOHOL CONSUMPTION, TOBACCO SMOKING, ETC.
14. ENZYME INHIBITION – MECHANISM, CLINICAL SIGNIFICANCE
15. ENZYME INDUCTION – MECHANISM, CLINICAL SIGNIFICANCE
16. ADVERSE DRUG REACTIONS – CLASSIFICATION
17. ADR MONITORING – ROLE OF THE PHARMACIST IN ADR MONITORING SYSTEM
18. DRUG ALLERGY. GENETIC POLYMORPHISM

19. MECHANISMS OF MUTAGENICITY, CARCINOGENICITY, IMMUNOLOGICAL TOXICITY, GONADAL TOXICITY
20. DRUG TOXICITY IN THE PREGNANCY. ADVERSE DRUG REACTIONS DURING PREGNANCY AND LACTATION.
21. PHARMACEUTICAL DRUG INTERACTIONS: IN VITRO IMCOMPATIBILITIES.
22. TOXICOLOGICAL ASPECTS OF PHARMACOKINETIC DRUG INTERACTIONS: EFFECTS ON ABSORPTION, PLASMA PROTEIN BINDING AND DISTRIBUTION. MECHANISMS AND CLINICAL SIGNIFICANCE.
23. TOXICOLOGICAL ASPECTS OF PHARMACOKINETIC DRUG INTERACTIONS: EFFECTS ON RENAL EXCRETION. MECHANISMS AND CLINICAL SIGNIFICANCE.
24. TOXICOLOGICAL ASPECTS OF PHARMACODYNAMIC DRUG INTERACTIONS. MECHANISMS AND CLINICAL SIGNIFICANCE.
25. TOXICOLOGICAL ASPECTS OF MULTIPLE DRUG ADMINISTRATION – TOLERANCE, TACHYPHYLAXIS, CUMULATION
26. DRUG ABUSE. DRUG DEPENDENCE. WITHDRAWAL SYNDROME
27. TOXICOMANIA – CLASSIFICATION, CHARACTERISTICS. SPECIFIC INJURIES
28. FACTORS INFLUENCING TOXICITY: CHEMICAL AND PHYSICAL FACTORS, PHARMACEUTICAL FORM, DOSAGE, ROUTE OF ADMINISTRATION.
29. FACTORS INFLUENCING TOXICITY: GENETIC FACTORS, AGE, GENDER, DISEASES, PATIENT COMPLIANCE.
30. GENERAL PRINCIPLES OF ACUTE INTOXICATION TREATMENT. ANTIDOTES – MECHANISMS OF ACTION.
31. DRUG INDUCED INJURIES OF THE CENTRAL NERVOUS SYSTEM
32. DRUG INDUCED INJURIES OF THE CARDIOVASCULAR AND THE RESPIRATORY SYSTEMS
33. DRUG INDUCED INJURIES OF THE HEMATOPOETIC SYSTEM.
34. DRUG INDUCED INJURIES OF THE GASTROINTESTINAL TRACT AND THE LIVER
35. DRUG INDUCED INJURIES OF THE KIDNEY
36. DRUG INDUCED INJURIES OF THE SKIN AND THE EYE
37. ADVERSE DRUG REACTIONS OF NONSTEROID ANTIINFLAMMATORY DRUGS
38. ADVERSE DRUG REACTIONS OF ANTIARRHYTHMICS, ACE – INHIBITORS AND DIURETICS.
39. ADVERSE DRUG REACTIONS OF DIGITALIS GLYCOSIDES, BETA-ADRENORECEPTOR ANTAGONISTS AND CALCIUM CHANNEL ANTAGONISTS.

40. ADVERSE DRUG REACTIONS OF INHALATION AND NONINHALATION ANAESTHETICS, HYPNOTIC, ANTIEPILEPTIC AND ANTIPARKINSONIC DRUGS.
41. ADVERSE DRUG REACTIONS OF NEUROLEPTIC, ANXIOLYTIC AGENTS AND ANTIDEPRESSANTS.
42. ADVERSE DRUG REACTIONS OF CORTICOSTEROIDS, ORAL CONTRACEPTIVES AND STATINS.
43. ADVERSE DRUG REACTIONS OF ANTIBIOTICS.
44. ADVERSE DRUG REACTIONS OF SULPHONAMIDES, TUBERCULOSTATIC AGENTS AND QUINOLONES.
45. ADVERSE DRUG REACTIONS OF ANTIFUNGAL, ANTIMALARIAL, ANTIPROTOZOAL AND ANTIHELMINTIC DRUGS
46. TOXICOLOGY OF IRRITATING THE UPPER RESPIRATORY TRACT GASES, TREATMENT AND ANTIDOTES
47. TOXICOLOGY OF CARBON MONOXIDE AND CYANIDES, TREATMENT AND ANTIDOTES
48. TOXICOLOGY OF ORGANIC SOLVENTS (BENZENE, CHLORINATED HYDROCARBONS, ACETONE) – TOXICOKINETICS AND TOXICODYNAMICS, TREATMENT AND ANTIDOTES
49. TOXICOLOGY OF ARSEN AND HEAVY METALS (LEAD, MERCURY, CADMIUM) – TOXICOKINETICS AND TOXICODYNAMICS, TREATMENT AND ANTIDOTES
50. TOXICOLOGY OF PESTICIDES (CHLORINE AND PHOSPHORUS, CARBAMATES) – TOXICOKINETICS AND TOXICODYNAMICS, TREATMENT AND ANTIDOTES
51. INTOXICATION WITH ALCOHOLS (ETHANOL, METHANOL, ETHYLENE GLYCOL) – TOXICOKINETICS AND TOXICODYNAMICS, TREATMENT AND ANTIDOTES. NICOTINE DEPENDENCE (TOBACCO SMOKING) – TOXICOKINETICS AND TOXICODYNAMICS, TREATMENT AND ANTIDOTES
52. TOXICOLOGY OF WIDELY USED PLANTS AND FOOD ADDITIVES. POSSIBLE CYT P450 INTERACTIONS
53. POSSIBLE ALTERATION OF CLINICAL LABORATORY PARAMETERS CAUSED BY MEDICINES
54. ACUTE INTOXICATION WITH NARCOTIC ANALGESICS (MORPHINE AND MORPHINE ANALOGUES) – TREATMENT AND ANTIDOTES
55. ACUTE INTOXICATION WITH NEUROLEPTIC AND ANTIDEPRESSANT DRUGS – TREATMENT AND ANTIDOTES
56. ACUTE INTOXICATION WITH SEDATIVES, HYPNOTICS AND ANXIOLYTIC DRUGS – TREATMENT AND ANTIDOTES