## Exam questions sub-questions for students of the Bachelor of Pharmacy program in the Pharmaceutical Chemistry II

- 1 Classification of antibiotics, the peculiarities of standardization; penicillins, cephalosporins, aminoglycosides; their characterization, methods of analysis, storage, uses.
- 2 Alicyclic compounds. Adamantane derivatives, monocyclic, bicyclic and tetraterpenes; the general characteristics of steroid compounds. Calciferols.
- 3 Cardenolides, gestagens their characterization, methods of analysis, storage, uses.
- 4 Androgens, estrogens. Corticosteroids, statins their characterization, methods of analysis, storage, uses.
- 5 Aromatic compounds their characterization, peculiarities of standardization; phenols, quinones and their derivatives. Tetracyclines. Aureolic acid derivatives.
- 6 Para-aminophenol derivatives, aromatic acids and their derivatives, Diethylaminoacetanilides
- 1 Analysis of Glutamic Acid
- 2 Analysis of Terpin hydrate
- **3** Analysis of Benzylpenicillin potassium (sodium)
- 4 Analysis of Methyltestosterone
- 5 General and specific identification reactions on phenol derivatives

- 6 Derivatives of para-amino salicylic acid and ortho-amino benzoic acid; oxyphenylalkylamines, aryloxypropanolamines, oxyphenylaliphatic amino acids; nitrophenylalkylamines; iodine derivatives of aromatic and arylaliphatic amino acids
- Sulfonamides; amides of chlorobenzenesulfonic acid; benzenesulfonic acid alkylureides;
  benzenesulfochloramides.
- 8 The classification and peculiarities of the methods of analysis of heterocyclic compounds; oxygen-containing heterocyclic compounds: derivatives of nitrofuran and benzopyran
- **9** Nitrogen-containing heterocyclic compounds: derivatives of pyrrole, pyrrolidine; pyrrolizidine, indol- their characterization, methods of analysis, storage, uses.
- **10** Derivatives of pyrazole, imidazole, pyridine their characterization, methods of analysis, storage, uses.
- 11 Derivatives of tropane, ecgonine, quinoline, quinuclidine their characterization, methods of analysis, storage, uses
- 12 Derivatives of pyrimidine, ethylamine, ethylenediamine dimethylaminoethanol; purine derivatives
- **13** Derivatives of pteridine, isoalloxazine, phenothiazine, azepine, benzodiazepine, oxazine their characterization, methods of analysis, storage, uses.
- 14 Analysis of Caffeine-sodium benzoate
- 15 Analysis of Ascofen tablets
- 16 Analysis of Euphylline substance
- 17 Analysis of Euphylline solution for injection
- 18 Analysis of Resorcinol
  - 19 Analysis of Benzoic acid
- 20 Analysis of Salicylic acid or Sodium salicylate
- 21 Analysis of Paracetamol
- 22 Analysis of Aspirin
- 23 Analysis of Novocain

24 Analysis of Mesaton	sis of Mesatone	Analysi	24
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- 25 Analysis of Streptocide
- 26 Analysis of Norsulphasol
- 27 Analysis of Novocainamide substance
- 28 Analysis of Furacillin
- 29 Analysis of Cyanocobalamin
- 30 Analysis of Vikasol
- 31 Analysis of Amidopyrine or Analgin
- 32 Analysis of Dibazol
- 33 Analysis of Nicotinic acid
- 34 Analysis of Isoniazid
- 35 Analysis of Pyridoxine hydrochloride
- 36 Analysis of Papaverine hydrochloride
- 37 Analysis of Validole