

**The list of compounds, formulas of which are required
for final exam from Medical Chemistry
(study branches - General Medicine and Dentistry)**

Thermodynamics

- energy rich compounds (phosphoenol pyruvate, 1,3-bisphosphoglycerate, creatine phosphate)

Organic compounds

- biologically important mono-, di- and trihydric alcohols
- saturated mono- and dicarboxylic acids with 2 to 6 carbon atoms
- derivatives of carboxylic acids, representing intermediates of Krebs cycle
- ketone bodies
- amino alcohols occurring in phospholipids structure
- urea and its derivatives

Saccharides

- Fischer, Tollens and Haworth formulas of important hexoses (glucose, mannose, galactose, fructose) and ribose
- Haworth formulas of biologically important phosphate ester of monosaccharides
- disaccharides (maltose, lactose, sucrose)

Amino acid, peptides

- proteinogenic amino acids and dipeptides derived from them
- tripeptide glutathione

Lipids

- saturated carboxylic acids with 16 to 20 carbon atoms
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- 2-monoacylglycerol
- triacylglycerol generally as well as with bound fatty acids with 16 to 20 carbon atoms
- phosphatidic acid and derived phospholipids (phosphatidyl choline, phosphatidyl ethanolamine phosphatidyl serine)
- ceramide and phospholipids derived from it (sphingomyeline)
- cholesterol
- prostanoic acid
- isoprene

Nucleic acids

- purine and pyrimidine bases and derived nucleosides, nucleotides, deoxynucleosides, deoxynucleotides, cyclic nucleotides (cAMP, cGMP)
- pairing of complementary nitrogen bases
- uric acid

Vitamins

- niacin – B₃
- pyridoxine – B₆
- vitamin C

Coenzymes

- pyridoxal phosphate
- NAD⁺, NADH