

**Topics for the evaluation of knowledge
BIOCHEMISTRY OF CHOSEN ORGANS, TISSUES AND BODY FLUIDS**

1. Exchange and transport of respiratory gases
2. Acid-base balance - the content of body fluids - carbonate buffer of plasma and lungs - acidosis and alkalosis
3. Definition and functions of blood
4. Structure and meaning of heme
5. Degradation of hemoglobin
6. The content of plasma (protein and nonprotein components of plasma)
7. Blood coagulation
8. Functions of kidneys
9. Characteristics of stages of formation of urine
10. Clearance coefficient and renal threshold
11. Describe the content of physiological urine and provide with processes where particular compounds are synthesised
12. Characteristics of pathological components of urine
13. Structure and classification of hormones
14. Mechanisms of action of hormones
15. Hormones and diseases - problems related to selected cases (on line didactic materials in programme Casus)
16. The difference between hormones and enzymes
17. Structure and classification of vitamins
18. Avitaminoses, hypovitaminoses, hypervitaminoses
19. Catalytic function of vitamins (coenzymes)
20. Biochemistry of vision
21. Bile acids - composition, biological meaning
22. Liver - biochemical and detoxicative function
23. Digestive tract - biochemical function
24. Metabolic profile - muscles, adipose tissue
25. Milk - describe the composition of milk and the source of compounds
26. Metabolism of xenobiotics - biotransformation and detoxification
27. 4 cases (Beneficial or deleterious cortisol, A dairy tale, To be or not to be pregnant, Inflammation)

