**Variant 1**

**Write the reaction equation, indicate the key enzymes, their regulation and nomenclature:**

Tell us about the catabolism of adenine in the composition of adenosine. Indicate the catabolism of which nitrogenous bases you described - purine or pyrimidine. Name the products and ways to use them.

**Solve the case problem:**

1. The child has had an infectious disease. What changes in protein fractions of blood plasma can be expected?

**Variant 2**

**Write the reaction equation, indicate the key enzymes, their regulation and nomenclature:**

Describe the synthesis of uracil. Indicate the catabolism of which nitrogenous bases you described - purine or pyrimidine. Name the products and ways to use them.

**Solve the case problem:**

1. Prescribe a diet for a gout patient.

**Variant 3**

**Write the reaction equation, indicate the key enzymes, their regulation and nomenclature:**

Tell us about the catabolism of guanine in the composition of guanosine. Indicate the catabolism of which nitrogenous bases you described - purine or pyrimidine. Name the products and ways to use them.

**Solve the case problem:**

1. The patient has edema. With a change in the concentration of which blood plasma proteins this condition can be associated and why

**Variant 4**

**Write the reaction equation, indicate the key enzymes, their regulation and nomenclature:**

Describe the synthesis of heme. Indicate the localization of the process, substrates for synthesis, the role of heme in biochemical processes

**Solve the case problem:**

1. The child is currently sick with an infectious disease. What changes in protein fractions of blood plasma can be expected?