**Belarusian State University   
Faculty of Mechanics and Mathematics  
Department of nonlinear analysis and analysis of the economy**

**Annotation to the diploma work  
"Application of system analysis in inventory management"**

**Arseniy Kuzmin,**

**Diploma advisor Olga Pindrik**

**2017**

The graduate work consists of:

- 35 pages,

- 13 used sources.

Keywords: RESERVE MANAGEMENT, OPTIMAL POLICY, THE COSTRUCTIVE PROBLEM OF THE THEORY OF SYSTEMS, THE PROBLEM ON CREATION OF GRAIN RESERVES

The diploma examines the models of inventory management as solution of the constructive problem of the theory of systems.

The aim of the diploma work is to study some models of management, in

particular, consider examples of the tasks of the management model reserves of

type (s,S) and the task of creating grain stocks. The main emphasis is optimization

problem, finding the optimal policy, functions costs and optimal values for the

models considered.

To achieve this goal were used:

- methods for solving inventory management problems.

The diploma work includes:

1) analysis of the basic models of inventory management.

2) solving the problem of creating grain stocks, tasks for the management model of stocks of type (s,S).

The diploma work is of an abstract nature. Material, which is considered and studied can be used to read special courses on models of inventory management.

All the results of the thesis work are rigorously proved according to the rules of

math.

The diploma work is of an abstract nature. Material, which is considered and

studied can be used to organize the work of any inventory management.

The diploma work was written by the author himself.