

**ANNOTATION**  
**of report on a pre-diploma practice of a sixth-year student,**  
**group BT-51s**  
**specialty 7.05140101 - Industrial Biotechnology**  
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"Technology of enzyme immunoassay test- system«DIA-HIV-1/2  
production "

Pre-diploma practice report contained 64 pages of printed text. The report consists of an introduction, eight chapters, conclusions, list of references and contains 8 figures and 4 tables.

The report of the pre-diploma practice is describing the production process of enzyme immunoassay test- system«DIA-HIV-1/2».

The topicality of the chosen theme research, the goal of pre-diploma practice and its problems is explained in the introduction.

The first part of the report is devoted to the technical and economic characteristics of the company«DiaProphMed».

The second part of the report presents the theoretical foundations of the technologies used in the enterprise.

Etiology and pathogenesis of HIV infection is reviewed in the third part of the report.

The general characteristics of«DIA-HIV-1/2» test systems is showing the fourth part of the report.

The description of the main stages of the process is showing the fifth part of the report.

The apparatus scheme of production is shown in the sixth part of the report.

The control of finished products manufacturing is shown in the seventh part of the report.

The safety and environmental protection is describing in eighth part of the report.

The technological and apparatus scheme of test-system «DIA-HIV-1/2» production are shown in the appendices.

Following tasks have been resolved as a result of pre-diploma practice: the general characteristics of the enterprise and its main technical – economic parameters are shown, the characteristic of the producer *Escherichia coli* are defined, main and secondary stages of the process of test-system «DIA-HIV-1/2» production are described.

The following conclusions were made according to the results of the pre-diploma practice:

- this system has a high sensitivity and specificity in the detection of total (IgG, IgM) antibodies to human immunodeficiency virus types 1 and 2; shows high stability results for a certain period of use.

- disadvantage of this system is the high cost of test systems to address this problem is urgent improvement and optimization technology.