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**ORGANIZATION OF TESTING IN DISTANCE LEARNING  
(ON THE BASE OF DISTANCE LEARNING SYSTEM  
“KHERSON VIRTUAL UNIVERSITY, 2.0”)**

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*Descriptions of testing process and different types of test questions, which are realized in distance learning system «Kherson Virtual University, 2.0» are considered in the article.*

**Keywords:** *distance learning, testing, linear testing, an adaptive testing, psychological – testing.*

The appearance of global network the Internet stimulated the creation and development of teaching with the help of new information technologies, and universal distribution of distance form of teaching. Internet allowed to unite not only before the known instruments of teaching but also to extend their list appreciably, exerted substantial influence on an informative culture in an educational environment.

At the present time teaching and learning over the Internet or distance learning is frequently considered as a fully serious *alternative to traditional education*, allowing student to get deep knowledge.

Distance learning as one of education system forms developed before the appearance of computer network Internet, and gradually increased the complex of used technologies. At first the so-called keys-technology was used: structured educational methodical materials were completed in the special set ("keys") which was send to student for an independent study. With the lapse of time paper folders and textbooks were supplemented with records on magnetic mediums and CD-ROM, and television technologies began to apply for conducting lessons and reading lectures. Thus a student had to visit periodically internal consultations of teachers (tutors) in the remote (regional) educational centers specially created for these aims. Soon, in connection with fast development of information technologies and Internet, distance learning was created.

Distance learning is learning at which the giving of educational materials to student and greater part of co-operating with a teacher carries out with the use of modern information technologies: satellite communication, computer telecommunications, national and cable television, multimedia, learning systems [1].

With the development of distance learning test control is an integral part of distance learning course. Test control realization of knowledge of listeners of distance learning courses is one of main problems of distance learning. The analysis of the last achievements in area of testing in the distance learning showed that many distance learning systems used testing as main element of verification of student's knowledge. However not all systems can offer the variety of types of test questions, for creation and conducting the effective testing [2].

The *purpose* of the article is an analysis and consideration of different types of test questions, which are presented and developed on the base of distance learning system “Kherson Virtual University, version 2.0” [www.dls.kherson.ua/dls] Kherson State University. This system was developed by staff of Multimedia and Distance Learning Department of Research Institute of IT Kherson State University.

**Testing in Distance Learning**

Test is an instrument, consisting of questions with the systems of processing and estimation of result. Test control differs from other methods of control (verbal and writing exams, tests, written test) that it is specially prepared set of tasks, it allows objectively and sufficiently to estimate knowledge of student by means of statistical methods [3].

Basic merits of test control usage are:

- objectivity of verification results, that is the presence of beforehand certain answer (answers) each time leads to one and other result;
- possibility of verification automation of student knowledge with the use of computers;
- possibility of the use in the distance learning systems.

The application of computer in conducting of test control not only facilitates the work of teacher at verification of tests but also promotes motivation of student educational activity, reducing simultaneously emotional tension in the process of control.

Distance learning system “Kherson Virtual university 2.0” gives an opportunity to conduct testing in distance learning group and use the different kinds (types) of questions which are realized according to IMS standard of distance learning [4].

In the system the possibility of creation of three types of testing is realized:

1. Linear test (for correct answer the student gets the certain amount of points);
2. Adaptive test (testing begin with easy questions, if the student answers questions right, next questions are complicated, if he answers not correct, simple questions are offered);
3. Psychological test (each question of test has ranges of meaning, the student gathers the certain amount of points and the system determines the result).

### Creation of Linear Test

In the article we will consider the creation of the linear testing and basic types of questions before not realized on the base of distance learning system “Kherson Virtual University 2.0”.

#### 1. Associativity

Student should choose the correct answer from the drop list and correlate with the offered answers.

The screenshot shows a web-based test interface. At the top, there is a header bar with the text 'Тест: Українська література' on the left and 'Питання: вопрос 3' on the right. The main content area contains the question: 'Вкажіть століття в якому проходив бурхливий розвиток кожної з мов'. Below the question, there is a dropdown menu with three options: 'церковнослав'янська нова', 'Українська нова', and 'польська нова'. Each option has a small arrow indicating it is a dropdown menu.

*Pic.1. Question type “Associativity”*

2. Order.

Student should put the answers in correct order.

Тест: Українська література      Питання: Вопрос 5

**Вкажіть послідовність розвитку літературної української мови в середині 15 століт**

1506 рік ↓  
 ↑ 1515 рік ↓  
 ↑ 1524 рік

*Pic.2. Question type "Order"*

3. Comparison.

Student should put the marks opposite the correct answer.

Тест: Українська література      Питання: Вопрос 6

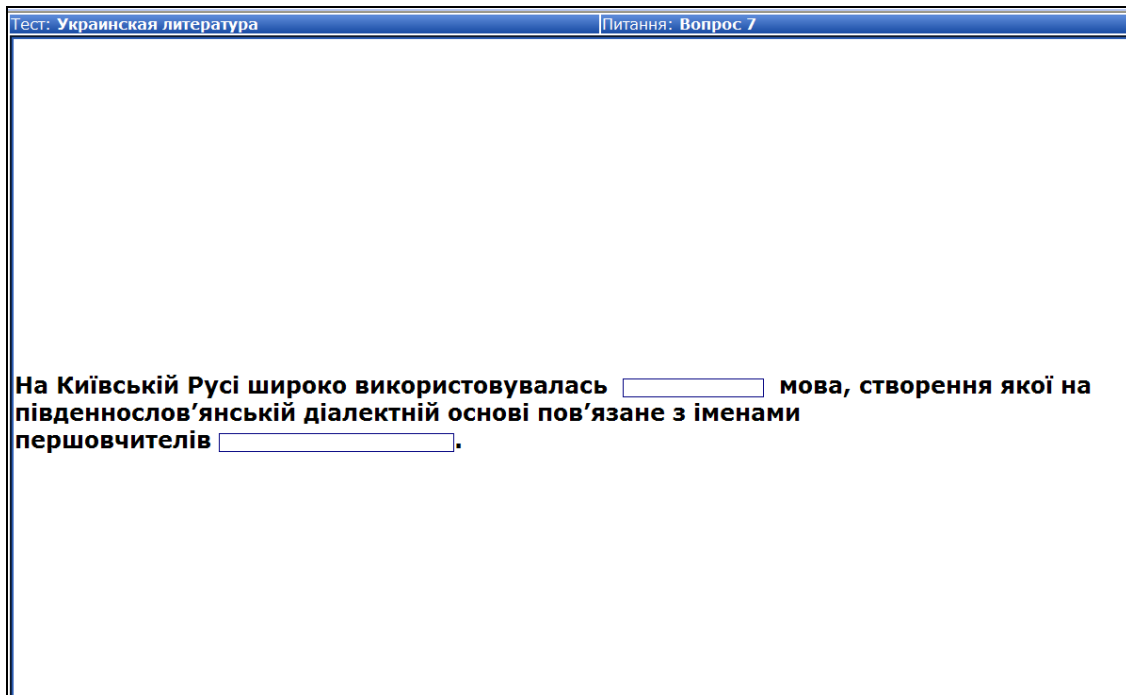
**Розвитком якої мови займався кожен діяч літератури**

	Адам Міцкевич	Тарас Шевченко	Олександр Пушкін
Польська мова	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Російська мова	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Українська мова	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Pic.3. Question type "Comparison"*

4. Text in context

Student should write the correct answer in the context of sentence.

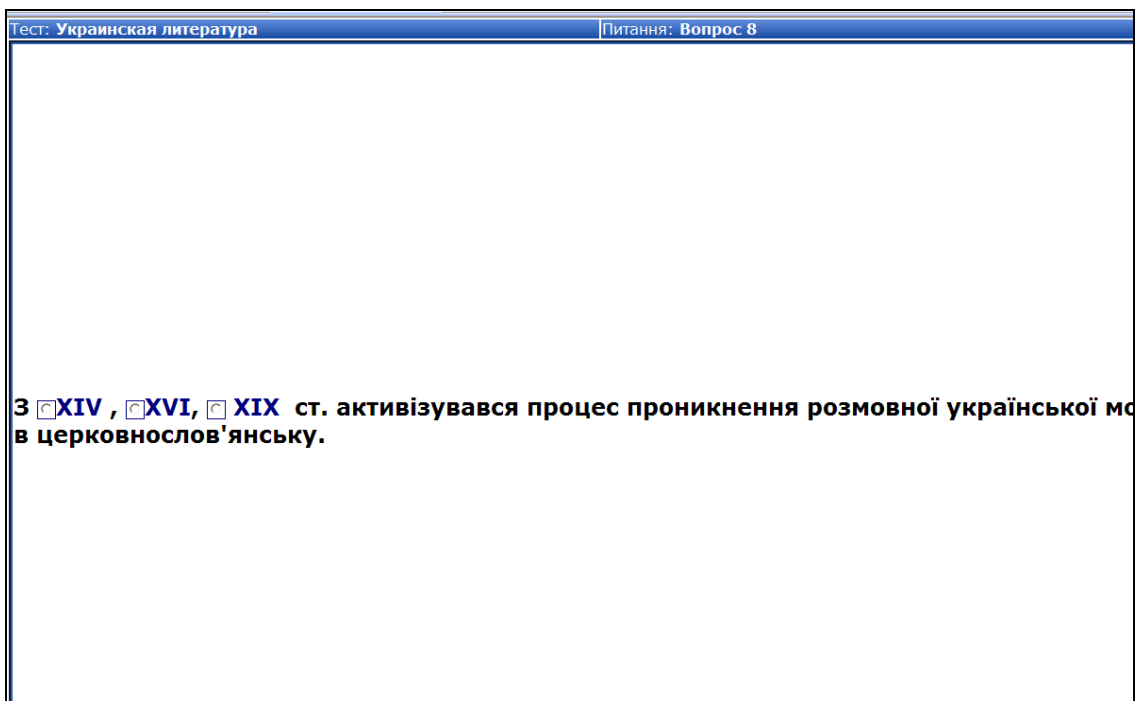


The screenshot shows a test window with a blue header bar. On the left, it says 'Тест: Украинская литература' and on the right, 'Питання: Вопрос 7'. The main area contains the following text: 'На Київській Русі широко використовувалась  мова, створення якої на південнослов'янській діалектній основі пов'язане з іменами першовчителів .

*Pic.4. Question type "Text in context"*

5. Choice in context

Student should choose the correct answer (put the mark) in the context of sentence.



The screenshot shows a test window with a blue header bar. On the left, it says 'Тест: Украинская литература' and on the right, 'Питання: Вопрос 8'. The main area contains the following text: 'З  XIV ,  XVI,  XIX ст. активізувався процес проникнення розмовної української мови в церковнослов'янську.'

*Pic.5. Question type "Choice in context"*

6. Multiple choices in context.

Student should choose a few correct answers (put the marks) in the context of sentence.

Тест: Українська література	Питання: Вопрос 9
<p><b>XVIII ст. в історії російської культури — це доба активної розбудови російської літературної мови, розширення і переформування її основи, коли після короткочасно періоду панування трьохстильової ієрархії перемагає тенденція до злиття двох мовних стилів — <input checked="" type="checkbox"/> російсько-польської, <input checked="" type="checkbox"/> церковнослов'янської, <input type="checkbox"/> народно-розмовної і народно-розмовної.</b></p>	

*Pic.6. Question type “Multiple choice in context”*

7. Combo box in context

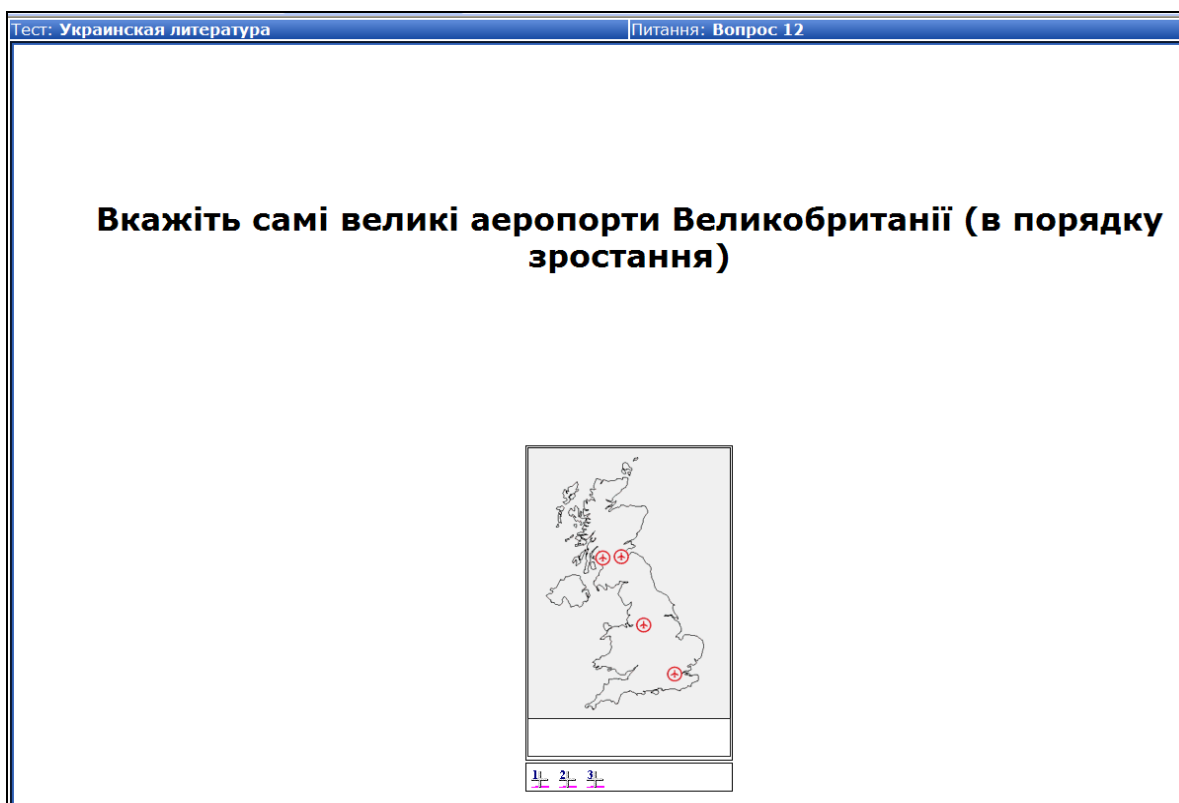
Student should choose the correct answer in combo box in the context of sentence.

Тест: Українська література	Питання: Вопрос 10
<p><b>Історична заслуга <input type="text" value="І. Котляревського"/> полягає в тому, що він віднайшов єдиний на той час перспективний шлях становлення літературної мови, використавши селянську говірку як гомогенну мовну основу словесного мистецтва.</b></p>	

*Pic.7. Question type “Drop list in context”*

## 8. Graphic Order

Student should put the marks in correct order on the picture.



*Pic.8. Question type “Graphic Order”*

### **Test Settings**

For creation of the effective testing on knowledge verification, a teacher (tutor) should execute the certain settings. The distance learning system “Kherson virtual university, version 2.0.” allows setting an order of test question. Tutor set a parameter «Random selection», questions are selected by in a random way, otherwise – in order of its following [5].

Test makes provision for fix time. The teacher independently fixes time passing of testing.

Parameter «Amount of questions» is an optimum amount of questions for passing. If 0 – all of questions are used in testing. It is possible to specify the certain amount of questions for passing of test from all test questions.

Parameter «Allow to come back» – student has an opportunity to return on previous question and change the variant of answer.

After setting of necessary test parameters, the teacher (tutor) can use the test in distance learning group and conduct testing.

Testing results are checked by the system and saved in group rating. The student has an opportunity to look over results and print it at any time [6].

### **Conclusion**

So, we analyzed and considered the basic types of questions of linear test, realized in distance learning system “Kherson Virtual University, version 2.0”. These types of test questions are developed in accordance with International Standard IMS of distance learning. With the use of the types of questions at creation of test the teacher (tutor) will be able objectively and effectively to check up the quality of students knowledge.

**BIBLIOGRAPHIC REFERENCES**

1. Дистанционное обучение: Учеб. Пособие / Под ред. Е.С.Полат. – М.: Гуманит. изд. Центр ВЛАДОС, 1998. – 192с.
2. Кравцов Г.М. Система дистанционного обучения ХГУ // Материалы второй международной научно-практической конференции “Информатизация образования Украины: состояние, проблемы, перспективы”. Херсон. – 2003. – С.70-72.
3. Васильев В.И., Демидов, А.Н., Малышев Н.Г., Тягунова Т.Н. Методологические правила конструирования компьютерных тестов. – М.:ВТУ, 2000. – 64 с.
4. Кравцов Г.М., Кравцов Д.Г. Модель контроля знаний в системе дистанционного тестирования “Web-Examiner” по стандарту IMS // *New Information Technologies for All: State of the Art and Prospects*. Kiev. – 2007. – С. 208-209.
5. H. Kravtsov, D. Kravtsov. Knowledge Control Model of Distance Learning System on IMS Standard / *Innovative Techniques in Instruction Technology, E-learning, E-assessment, and Education*. – Springer Science + Business Media V.B. – 2008. – P.195 – 198.
6. Кравцов Г.М., Кравцов Д.Г., Козловський Е.О. Система дистанционного тестирования на основе стандарта IMS // “Information Technologies in Education for all”. – Киев. – 2006. – С.283 – 292.