

An exam program

Students will be asked the following questions on the exam:

1. Write about arithmetical, logical, relational and bitwise operations in C#. Give examples.
2. Describe single-dimensional, multidimensional, and jagged arrays in C#. Give examples.
3. Describe conditional and loops statement in C#. Give examples.
4. Describe the concepts and paradigms of the object-oriented programming.
5. Highlight relations between classes and objects.
6. Create classes with three types of scope of view of their members.
7. Describe the difference between fields and properties.
8. Characterize static classes. Highlight their role in the object-oriented programming
9. Write definitions of encapsulation and inheritance. Give examples.
10. Write definitions of abstraction and polymorphism. Give examples.
11. Create classes with different methods. Describe overloaded methods.
12. Describe abstract classes and highlight their role in the object-oriented programming.
13. Describe creation of constructors and destructors in classes.
14. Write about sealed and partial classes. Give examples.
15. Characterize classes, structs and enumerators.
16. Write about collections in C#. Give examples of Arrays, ArrayLists, Stacks and Queues.
17. Describe collections in C#. Give examples of Hash tables and Sorted lists.
18. Describe creation of Windows forms applications.
19. Write about Windows forms. Describe creation of Paint and Menu applications,
20. Write about Windows forms. Describe creation of the calculator and notepad applications.

The rules for students:

If the exam takes place with a proctoring application, a student needs to install Aero-exam plugin in Chrome browser using the following link (<https://chrome.google.com/webstore/detail/aero-proctoring/pknhbkoicndpap-fcbhhccnikagmankgg/related?hl=ru&authuser=0>). A student has to authorize on the portal (<https://aeroexam.world/oauth2> Proctoring interface: <https://aero-exam.world/oauth2>) on a day of the exam according to the official schedule.

In case of the mandatory recording process, it is also required to organize a video conference.

As soon as the exam schedule becomes known, the teacher creates a link to the videoconference on videoconferencing platforms (Microsoft Teams, ZOOM, Skype or others). The start date of the videoconference is the start time of the exam as scheduled. According to the exam schedule, the teacher starts the videoconference, sends invitations and starts the exam participants. After connecting all the participants online in the conference, the teacher starts a video recording of the exam, warns that video is being recorded and announces the rules of the exam. The teacher asks the examinee to show an identity document (a national ID card or a passport) on a video camera. There should be no strangers in the room. A student must sit directly in front of the web camera, not leave his/her place without a warning and use any additional materials that can help to pass the exam. After completing the test, the teacher allows him/her to leave the video conference.

The teacher puts the final grades of the student from the Moodle system to the Univer system.