## Test instructions

for students, proctors and graders

## About the test

There will be 2 different versions of the test so that adjacent students will have entirely different questions.

The test will be identical in format to the previous year (see archive on website). For every version there will be 3 pages with short essay questions or problems.

You will have $\mathbf{7 9}$ minutes and 59 seconds to complete the test (this is the maximum allowed for a midmodule test by HSE regulations).

Examined material corresponds to lectures 1-7 the relevant classes, practice sets 1 - 3 and homework 1 and 2.

You will have to write your answers in designated spaces below each question. Space will be limited, thus your answers must be short and up to the point. Answer only what you are asked. Do not waste time by writing redundant information.

You will be provided with scrap paper and you can also use the back of the sheets as scrap. I recommend that you first solve the problems in scrap and then you transfer them to the designated space.

If you want to maximize your score, your questions should look like: my answer is [this] because [of that], or [this] is the graph and [that] is what is going on, etc.

Once grading is over you will pick up your papers from the class teacher in one of the next labs.

## Recommended preparation

Your preparation is recommended to be based on the following order:

1. [Highly recommended] Notes you kept from the lectures in conjunction with slides. However, have in mind that no question that can be answered only from the slides will be on the test.
2. [Highly recommended] Solving relevant classes' and homework's problems. I guarantee that just reading the solutions will not help.
3. [Recommended] Past tests. However, have in mind that some of the questions from previous tests may partly or as a whole be irrelevant to this year's test because the material is being reorganized from year to year.
4. [Optional] Use P\&R for anything you do not understand from intuitive explanations that were offered in the lecture.
5. [Optional] Use Varian for any technical part you missed in the lecture.

## Information for the proctors

Students must be seated quietly at the right places by the time the test is supposed to start. Decline to distribute a paper to anyone who is not following your directions and send this person to me.

Inspect that seating is proper and students have only the allowed items on their desks before you start distributing the papers.

Your main priority is to monitor for cheating. I understand that this will be a particularly boring time for everyone involved in the proctoring but your attention should be at $100 \%$ at all times.

If it comes to your attention that someone uses unauthorized devices or materials, or anyone talks or whispers or signals anything to any other student, or someone seeks even the slightest visual access to someone else's paper or facilitates access to others please remove the papers of everyone involved and wait for me to handle this.

For removal of a student's paper you do not have to give a warning or an explanation to the student. The cameras in the room do a very good job providing evidence for prosecution. I used them twice last year.

## Information for the graders

Credit per task:

- Full credit only if the student demonstrates that masters the material and the explanation is sufficient and flawless for the level of the course.
- Partial credit for answers that are towards the correct direction but indicate in any way that the student's knowledge on the issue is lower than the course level.
- Small credit for answers that are not towards the correct direction but still indicate that the student has some knowledge on the issue.
- Zero credit for answers that make no sense even if relevant terms are used here and there out of context.
- Negative credit for obvious random guesses. If the student is "playing lotto" with the test, you may penalize the whole paper with -1 point per task that this occurs.


## Special cases:

- Answers that are consistently wrong should be awarded credit. That is, if a student makes a mistake in one part of a problem, and this mistake carries over to a later part, while the methodology in the later part is correct, the student should be penalized for the mistake in the first part but not in the later part.
- Any indication of failure to master the material to the level of the course should result to a reduction of credit including redundancies. For example, if a student offers a perfect answer in a task but then adds something that is irrelevant or wrong, you should remove points because this indicates failure in understanding.
- Any imperfection in an answer that is solely due to the use of English should not be penalized. Sometimes, students will use direct transliteration of Russian terms that do not make sense in English. However, as native Russian speakers, you may be able to make sense of what the student means. No points should be removed in this case.

On the papers, anything you cannot read is wrong. Anything that is not in English is wrong.
All theoretical questions in the test were clearly asked and answered in the lecture. Students who attended will be immediately able to recognize them and provide satisfactory answers. Those who were absent (physically or mentally) would just make up answers, so be prepared to read unbelievable bs in some of those papers.

If during the grading potential copying comes to your attention, notify me immediately, so we can go through the surveillance footage before it is recycled.

