Questionaire on

Subject of Examination (legible if possible ;))
Foundations of Stochastic Processes - Professor Caire.

- [x] Oral
- [ ] Written
- [ ] Oral Reeximination

Date: 06.04.2021
Duration: 30 minutes

Examiner: Professor Caire
Programme of Study: ISM

Preparation

a) Continuous attendance at lectures? [x] Yes [ ] No

b) Effects of a): [x] Positive [ ] None [ ] Negative

c) Amount of time spent on preparation: 100h [x] by yourself [ ] group work

d) Prior knowledge from other lectures/practical experiences?
Background in statistics. No background in signal processing and lack of electrical engineering foundations.

e) What resources did you use? (*literature, websites etc.*)
I used the material he gave us (lecture pdfs, videos of lectures, tutorial pdfs with solutions).

In the last tutorial he showed the catalogue of questions from last years oral exam which I tried to screen shot.
I heavily trained doing those questions and from I can judge about he used the same catalogue. (Attached).

f) Can you give any advice on the preparation of this exam?
He picked two questions at random from a range from topics, so you have to learn most topics (except continous-time markov chains and convergence theory). However you do not need to be able to perform all calculations as in the tutorial papers. The complexity of the exercises if far higher than what is reasonable to ask for in an oral exam. From the material I saw from last years questions in the written exam are more complex. However know all approaches and be prepared to explain them.

Exam

a) Had there been any agreements on form or contents of the exam? Were they met?
10 minutes preparation of two questions. 20 minutes to discuss what you prepared.

b) Advice on behaviour during the exam:
The professor started the exam slightly late (4min), which is why he pushed a bit at the end since he scheduled no break between exams. So was jumping into " giving hints " , leaving no time to think.

c) Examination style: (*atmosphere, questions: clear or unclear, in depth knowledge or general questions, specific interposed questions, specific questions in case of knowledge gaps, ...?*)
Questions where clear and they need in depth understanding of the subject matter. e.g. on my second question I should explain and proof the orthogonality principle, in the first question I had to relate the stationary distribution as a concept with the time average (Markov Chains).

Other questions

a) How were you graded? (*optional of course*) 1.3

b) Do you think this grade is appropriate? [x] Yes [ ] No (*why not?*)

c) Would you recommend this exam? [ ] Yes (*to whom especially?*) [x] No (*why not?*)

The course is very " self-contained " and put together with completness in mind. Theoretical. Like a math book.

d) Do you have any other advice or remarks about this exam?
Prof. explains by first principles but uses a lot of other knowledge he expects you to know (complex analysis, fourier, etc.) that I did not had (ism student taking electrical engineering courses). What a pain.

Contents of the Exam: Please try to reproduce as many questions as possible. At which points did the examiner ask for derivations, at which for analytic proof? (*If the space here is not sufficient do not hesitate to add additional sheets. But please staple the pages and number them.*)

I had question numbers 47 and 53 and will attach my collections of questions to the feedback mail.

Thank you for your help! **Your fellow students.**