Rules of the examination of "Metodi Matematici per l'Ingegneria" Academic year 2012/13 Location of Forlì Teacher: Davide Guidetti

Examinations are organized in "sessions", in each of which the candidate has at disposal a variable number of attempts ("appelli" or subsessions). The first session (three subsessions) will be kept in the next months of january and february. The following sessions will take place in june-july (two subsessions) and in september (unique subsession). The rules we are going to state will be valid throughout the academic year 2012-13.

Each subsession consists of a written examination, followed by an oral one. In order to overcome the global examination, the candidate will have to pass both the written and the oral examination in the same subsession. If this does not happen, he (she) will have to repeat both in the next attempt.

A candidate will be able to enroll in a subsession registering oneself in special lists in "Almaesami", which will be made available with a suitable anticipation. In case a student is not able to do this, he (she) can, alternatively, contact the teacher by e-mail (<u>davide.guidetti@unibo.it</u>) (not beyond the last day when it is possibile to register oneself), justifying the use of this unusual way of registration.

The candidate must be able to exibit a document with a photograph, in order to be recognizable.

In the written examination, he (she) will have, first of all, to answer to two theoretical questions, taken from a list which is put ar disposal, in twenty minutes. Each answer will get a mark from 0 to 3 (0 no answer or very bad one, 1 some answer but not good, 2 sufficient answer, 3 good answer).

After giving back the sheet with questions and answers, he (she) will have to solve, with some details, two exercises, concerning complex integration of Fourier transform or probability theory, in one hour. This second part will get a mark between 0 and 12. Finally, he (she) will have to fill a form with 4 multiple choice questions. (4 suggested answers, only one correct). A correct answer will receive three points, a not given answer will receive 0 points and a wrong one will receive -1 points. The final score will be the algebraic sum of the scores of the three parts.

The answers must be written in the forms given by the teacher. Answers written somewhere else will not be considered.

The maximum final score which can be obtained is 30(6+12+12).

Books, notes, computers of any type are not permitted. A candidate is not allowed to leave the room during each of the rhree parts of the examination. Among them there will be short intervals, during which it will be possibile to leave the room.

A candidate which is discovered to try to communicate with somebody else without permission will be sent out.

In order to be admitted to the oral examination, the minimum score is 15. In case o score equal to 13 or 14, the candidate will have will be asked to solve another exercise or answer to a theoretical question. In case this is done in an acceptable way, he (she) will be admitted to the oral examination with the score 15. Otherwise he (she) will have to repeat everything in the next attempt.

In the oral examination, the candidate will have to answer to theoretical questions or solve exercises, possibly even in written form. The maximim score for this part is 6 points. This score is added to that of the written examinations and the sum is the final mark. The final maximum score is 30, wth (possibly) "cum laude". Even a very bad oral examination may imply a global fail, whatever is the score in the written part.

Questions in the written examination will be formulated in english. For the answers, the candidate may use english or italian. Analogously, in the oral examinations, he (she) may use english or italian.

Finally, any candidate is allowed to take part to any subsession, without restrictions.