

## Department of Mathematical Sciences

### Examination paper for TMA4305 Partial Differential Equations

**Examination date:** 4 December 2020

**Examination time:** 09:00 – 13:00 plus a half hour for file uploads

**Permitted examination support material:** A / All support material is allowed

**Academic contact during examination:** Harald Hanche-Olsen

**Phone:** 92248767

**Technical support during examination:** Orakel support services

**Phone:** 73 59 16 00

## OTHER INFORMATION

**Notation and tips:** Except for the last problem, partial derivatives are often written using index notation: Hence  $\partial u / \partial t$  is often as  $u_t$ . It is completely acceptable to use a result stated in the problem set (show that ...) in a later question, even if you have not managed to prove it.

**Make your own assumptions:** If a question is unclear/vague, make your own assumptions and specify them in your answer. Only contact academic contact in case of errors or insufficiencies in the question set.

**Saving:** You may choose whether to upload solutions to each problem individually, or to upload your entire answer as one PDF file. If you do upload just one file, please make sure that the answers are in the correct order.

**Cheating/Plagiarism:** The exam is an individual, independent work. Examination aids are permitted, but make sure you follow any instructions regarding citations. During the exam it is not permitted to communicate with others about the exam questions, or distribute drafts for solutions. Such communication is regarded as cheating. All submitted answers will be subject to plagiarism control. [Read more about cheating and plagiarism here.](#)

**Citations:** Specify any sources used outside of the standard syllabus.

**Notifications:** If there is a need to send a message to the candidates during the exam (e.g. if there is an error in the question set), this will be done by sending a notification in Inspera. A dialogue box will appear. You can re-read the notification by clicking the bell icon in the top right-hand corner of the screen. All candidates will also receive an SMS to ensure that nobody misses out on important information. Please keep your phone available during the exam.

**Weighting:** *Since this is a pass/fail exam, I do not find it practical to adhere to some weighting. So long as you have demonstrated sufficient insight into several themes, you will pass the exam. You should choose to first do those problems you think you have a good chance at solving, completely or partially.*

## ABOUT SUBMISSION

**File upload:** All files must be uploaded before the examination time expires. 30 minutes are added to the examination time to manage the sketches/calculations/files. (The additional time is included in the remaining examination time shown in the top left-hand corner.)

*[How to digitize your sketches/calculations](#)*

*[How to create PDF documents](#)*

*[Remove personal information from the file\(s\) you want to upload](#)*

*OTHER IMPORTANT INFORMATION REGARDING SOFTWARE, FILE TYPES  
ETC.?*

NB! You are responsible to ensure that you upload the correct file(s) for all questions. Check the file(s) you have uploaded by clicking “Download” when viewing the question. All files can be removed or replaced as long as the test is open.

The additional 30 minutes are reserved for submission. If you experience technical problems during upload/submission, you must contact technical support before the examination time expires. If you can't get through immediately, hold the line until you get an answer.

**Your answer will be submitted automatically when the examination time expires and the test closes**, if you have answered at least one question. This will happen even if you do not click “Submit and return to dashboard” on the last page of the question set. You can reopen and edit your answer as long as the test is open. If no questions are answered by the time the examination time expires, your answer will not be submitted.

**Withdrawing from the exam:** If you become ill, or wish to submit a blank test/withdraw from the exam for another reason, go to the menu in the top right-hand corner and click “Submit blank”. This cannot be undone, even if the test is still open.

**Accessing your answer post-submission:** You will find your answer in Archive when the examination time has expired.