

## MST210 Revision and Exam

These are my thoughts as I am an exam marker for MST210. As you are now experienced at sitting OU exams then much of what you have experienced is applicable to this module. You will be familiar with the poor desk arrangement and inadequate space allotted.

### Revision

Tackling past exam questions is the best way to revise for the exam itself. It will help you get familiar with the handbook which is very much your friend. Remember that you can annotate your handbook. There is plenty of room in the HB. There are two blank pages at the back in which you can add questions and solutions of topics that are likely to occur and you are not too sure of the procedures. I believe that the best form of revision is to tackle as many past papers as possible. However, do not keep returning to those topics you are happy with! Put your units aside and try questions with the HB only (as if you are in an exam). I would leave the specimen paper until near to exam time then try this paper under exam conditions.

For past 209 papers, there are questions on some topics that are no longer in MST210; the topics were: Rate of Heat Transfer and Numerical Solutions of Differential Equations. You did meet Euler's Method in unit 1 and there may be an exam question on this topic. Further, many of the questions on MST207 papers are still relevant. The major difference is that calculators were allowed on MST207, they are neither allowed on MST210 nor MST209.

Students do not tackle mechanics questions and predominantly go for Differential Equations questions from unit 1 and 6. Do not use these as banker questions however, they may not be on the paper and the MST209 external examiner has commented that they were skewing the results. Therefore, over the years, these questions have become more difficult. We still have the same external examiner.

If you want papers prior to those offered by OUSA then let me know as I do have the MST207 papers (and solutions).

I have given a number of suggestions on additions to HB during the module. Please study the page which has an extensive list of integrals. It should cover all those you are likely to encounter on the exam but Fourier series integrals and identities should be added to the HB.

The night before the exam get all your materials ready. Do not forget your HB. You will need pens for writing and pencils and ruler for diagrams, sketches and Part 1. You may also want some drinks and nourishment. Do not forget some identity for the invigilator.

## The Exam

Make sure that you arrive at the exam centre of plenty of time. Make sure you know where it is and, if driving, where parking is allowed.

Be familiar with the current rubric - especially if you have been tackling past papers which will have a different format. Ensure that you know how to fill in the responses for Part 1.

The current paper has three parts. Part I has 19 questions and Part II 6 questions, all compulsory and Part III 5 questions from which you choose 2. Good time discipline - especially if you are a precise mathematician who can't let stuff go - is vital. Many marks are lost because bright, capable candidates ran out of time. I would start with the Part 1 and if you recognise the question then solve, else mark the paper and move onto the next until you have completed those you can do. Then, onto Part 2, reading each question carefully and employ the same approach. Now for Part 3, you have to attempt two questions. All attempts will be marked and the best 2 marks taken if more than 2 are tackled.

For a question which involves a lot of algebra, (are there any questions that DO NOT involve a lot of algebra!), there is often only a mark or so for the final re-arrangement. So, if you are pretty much there, do not bother to spend a lot of time tidying up - except where you have to 'show' your answer agrees with the solution. Even here, apply the old exam trick of just stating the answer in the question and you will probably not lose all that many marks - especially if it is pretty close.

When you start a new question from Part 2 (Part 1 has different format) then start it on a new page and when you start a Part 3 then start on the left-hand page of a blank page. The reason is to avoid transcription errors. When reading from the back of one page to the next, it is amazing how many transcription errors are made!

Do NOT cross out ANY working, even scribbles. For instance, if you redo a question then let the marker decide

which the better solution is – you will be credited with the better solution.

HB references are not required. No marks allotted for presentation but markers need to be able to follow your script (you probably have been at the receiving end of this comment many times!). Do underline vectors and express answers in sentences.

Ask for two answer books at the start of the exam and you can put your rough working at the back of the second (turn it around to start at the back; it will be more useful to you). Part 1 rough working will not be considered at any time. Submit all materials at the end of the exam. Take time once “last orders” has been called to write in the numbers of each question from Part II and III in the order attempted – it makes the marker happier! There no need to do this for Part I as these are on the special sheet that the markers do not see. Also you will be required to pin your answer books together. Do NOT put one book inside the other, despite what an invigilator may say. Being a first marker of a bundle of scripts, there is nothing more annoying than having to unpin and reorder the books!

If you have a panic attack in the middle of an exam, do not just sit there flicking through the paper thinking that you cannot do any question, simply put your hand up and say that you want to go to the toilet. Go outside for 30 seconds, take some deep breaths and compose yourself and then return to your desk.

## After the Exam

Do chat to colleagues but do not have a post-mortem of the paper. At home do not go through the paper and try to mark what you think you have done. It will only depress you and it will not be a good estimate of your mark. Just remember it was the hardest paper you have ever seen (at least until next year's cohort does their paper!) Marking starts on the Saturday after the paper has been sat and once MST224 is complete and will be completed by the following Wednesday. The Exam Board will meet on June 30<sup>th</sup> and I forecast the results will be published in the third week of July.

All the best,

Mike