

Subject: TU152: Fundamental Mathematics

Final Examination (Semester 2/2012)

Date: Tuesday 14th May 2013

Time: 09:00am-12:00pm

Instructions:

- Conditions of Examination
....√.... Closed book
....√.... No calculator
- This examination contains 7 questions with a total of 11 pages. There are a total of 100 marks.
- Write your student ID and seat number clearly on every page.
- Show all of your working in every problem. No credit will be given to an answer unsupported by works or explanations. The space on the back of each page can be used if necessary.
- All communication devices must be turned off and be deposited to the invigilator.
- Students are not allowed to be out of the exam room during examination. Going to the restroom may result in score deduction.

Information:

- Exponential/Logarithmic Functions $\approx$ 18 Marks
- Limit and Continuity $\approx$ 24 Marks
- Differentiation $\approx$ 23 Marks
- Partial Fraction Decomposition $\approx$ 10 Marks
- Curve Sketching $\approx$ 25 Marks
- Solving System is included in the topics above.
- Question #1 contains 10 sub-questions. You are asked to determine whether the statement is true or false. If it is true, explain why. If it is false, explain why or give an example that disproves the statement. (30 Marks)
- Question #2 contains 5 short answer sub-questions. (10 Marks)

Good luck!!!