Exam Cover

Student name: _____

ID-number: _____

THE HAGUE
UNIVERSITY OF
APPLIED SCIENCES
FACULTY TECHNOLOGY,
INNOVATION & SOCIETY
Location: **Delft**

Program:	**Course / Test:**
Electrical Engineering	**MATH**
Lecturer: J. op den Brouw	Date: Thursday 6 july 2017
Second Lecturer: B. Kuiper	Time: 13:00 h – 14:30 h
Group: EP21, EP22, EQ2D	Number of pages: 2 (including this page)
Module:	Number of questions: 3

With this exam you will receive:

☒ Lined answer paper   ☐ Questions written on exam
☐ Squared paper   ☐ Answer form ABCDE
☒ Scratch paper   ☐ Answer form Yes/No
☐ Lined cover sheet   ☐ Answer form Yes/No/Questionmark
☐ Attachments: _____   ☐ Other: _____

Allowed tools:

☒ Simple calculator   ☒ Drawing tools (ruler, pencil)
☒ Graphic/programmable calculator   ☒ Hand written notes: _____
☐ Computer   ☒ Books/readers: Reader MATH
☐ Formula sheet(s): _____

Attention:
Please hand in your copy of the exam.
Grading of examination:
Total grading points is 60.

To be handed in:
☒ All documents marked with name and ID-code, sorted per document
☐ All documents marked with name and ID-code, sorted per student (in lined cover sheet)

Important:
For this exam, the rules of the Programme and Examination regulations apply. This document is present in the exam room.
This exam is printed double sided;
Write your name and studentnumber on all documents.

Question 1 (10 pt)
Calculate $1 + 1$

Question 2 (30 pt)
Please find de primitives of the following functions:

   a) $\int x \ln x \, \mathrm{d}x$ (10 pt)

   b) $\int \sin^2 x \, \mathrm{d}x$ (10 pt)

   c) $\int x^2 \, \mathrm{d}x$ (10 pt)

Question 3 (20 pt)
Given the function: $f(x) = x^3 + 3x^2 + 5x + 1$. Find the extremae.