

National University of Singapore
Department of Mathematics

Semester 2, 2019/2020

MA1101R Linear Algebra I

Time allowed: 2 hours and 30 minutes

Instructions to candidates:

1. Get ready a signed copy of the Exam declaration form for this exam.
2. Use A4 size paper and pen (blue or black ink) to write your answers.
3. Write down your student number clearly on the **top left of every page** of the answers. Do not write your name.
4. Write on one side of the paper only. Write the question number and page number on the **top right corner of each page** (e.g. Q1P1, Q1P2, \dots , Q2P1, \dots).
5. This examination paper consists of 7 questions, for a total of 90 points. Excluding the cover page, there are 2 pages.
6. Answer all 7 questions.
7. This is an **open book** examination.
8. You are permitted to use **any kind of calculator, including MATLAB**. However various steps in the calculations should be laid out systematically.
9. Join the Zoom conference, turn on the video setting and keep it on at all times during the exam. Adjust your camera such that your face and upper body including your hands are captured on Zoom.
10. You may go for a short toilet break (not more than 5 minutes) during the exam.
11. Do the following at the end of the exam:
 - scan or take pictures of your work (make sure the scans or images can be read clearly) together with the declaration form;
 - merge all your scans or images into one pdf file (arrange them in the order: declaration form, Q1 to Q7 in their ascending page sequence);
 - name the pdf file in the format $\langle \text{Matric No} \rangle_MA1101R.pdf$ (e.g. **A1234567P_MA1101R.pdf**);
 - upload your pdf into the LumiNUS folder that has the name “Exam Submission”.
12. This folder will close on **April 30, 2020 at 19:30**. After the folder is closed, exam answers that are not submitted will not be accepted.

Do not write below this box.