**THE CHINESE UNIVERSITY OF HONG KONG**

**Department of Mathematics**

**MATH2040A/B Linear Algebra II, 2020/21 Term 1**

**Take-home Test One**

**Time and Date: 10:00am October 9 to 10:00am October 10**

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| Name | Student I.D. No. |
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**Directions:**

1. Print out this front page and write your Name and Student ID on it. Then, print out enough copies of the template of the answer sheet and use them for writing your solutions. Start each answer on a fresh page and write the number of the question attempted at the top of the page. Last, scan your complete work and submit them (the front page together with all complete answer sheets) online through Blackboard on or before 10:00am October 10. Only handwritten answers can be allowable and late submission will NOT be accepted.
2. Answer all questions in both Part I and Part II. Give adequate explanation and justification for all your computations, observations and reasonings. Write your proofs in a clear and rigorous way.
3. The test is open-book and open-notes, but it should be done absolutely by yourself without asking others in any format. Discussions amongst classmates are strictly prohibited. Your submitted solution will be checked carefully to avoid plagiarism. Here is the Honesty in Academic Work: *The Chinese University of Hong Kong places very high importance on honesty in academic work submitted by students, and adopts a policy of zero tolerance on cheating and plagiarism. Any related offence will lead to disciplinary action including termination of studies at the University. Although cases of cheating or plagiarism are rare at the University, everyone should make himself / herself familiar with the content of the following website:* [*http://www.cuhk.edu.hk/policy/academichonesty/*](http://www.cuhk.edu.hk/policy/academichonesty/)*, and thereby help avoid any practice that would not be acceptable.*

**For Examiner’s Use**

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| **Part I (50 points)** | | | | | **Part II (50 points)** | | | | | **Total** |
| I.1  (10p) | I.2  (10p) | I.3  (10p) | I.4  (10p) | I.5  (10p) | II.1  (10p) | II.2  (10p) | II.3  (10p) | II.4  (10p) | II.5  (10p) |
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