

Computer Architecture I Mid-Term II

Chinese Name: _____

Pinyin Name: _____

Student ID: _____

E-Mail ... @shanghaitech.edu.cn: _____

Question	Points	Score
1	1	
2	18	
3	10	
4	25	
5	13	
6	10	
7	14	
8	9	
Total:	100	

- This test contains 12 numbered pages, including the cover page, printed on both sides of the sheet.
- We will use Gradescope for grading, so only answers filled in at the obvious places will be used.
- Use the provided blank paper for calculations and then copy your answer here.
- Please turn **off** all cell phones, smart-watches, and other mobile devices. Remove all hats and headphones. Put everything in your backpack. Place your backpacks, laptops, and jackets out of reach.
- The total estimated time is 105 minutes.

- You have 105 minutes to complete this exam. The exam is closed book; no computers, phones, or calculators are allowed. You may use two A4 pages (front and back) of handwritten notes in addition to the provided RISC-V green sheet.
- There may be partial credit for incomplete answers; write as much of the solution as you can. We will deduct points if your solution is far more complicated than necessary. When we provide a blank, please fit your answer within the space provided.
- Do **NOT** start reading the questions/ open the exam until we tell you so!
- Unless otherwise stated, always assume a 32-bit machine for this exam.

1 1. First Task (worth one point): Fill in you name

Fill in your name and email on the front page and your ShanghaiTech email on top of every page (without @shanghaitech.edu.cn) (so write your email in total 12 times).