

# Computer Architecture I Final

Chinese Name: \_\_\_\_\_

Pinyin Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

E-Mail ... @shanghaitech.edu.cn: \_\_\_\_\_

Question	Points	Score
1	1	
2	14	
3	7	
4	5	
5	11	
6	8	
7	6	
8	7	
9	7	
10	20	
11	12	
12	2	
Total:	100	

- This test contains **14** 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.

- You have 120 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, email and student ID on the front page and your ShanghaiTech email on top of every following page (without @shanghaitech.edu.cn) (so write your email in total 14 times).