

**Instructions:**

- i. CLOSED book exam. No browsing. Keyboard use is prohibited.
- ii. Keep your camera ON throughout the test time.
- iii. Write your Student ID & Page Number at the top of each page.
- iv. At the end of the test, take pictures of your script, and convert it to a single pdf file. Rename it as **STUDENTID\_CT2.pdf**
- v. Capture & Submit during the upload session ONLY. DO NOT take pictures or upload even if your exam finishes early.

**Questions:**

1. If a smoothing filter is applied directly (with color vectors) on a color image, what difference will it make in contrast to the output where the filter is applied separately on each RGB color channel? 5
2. Draw the general shape of the transformation functions **used to correct excessive contrast in the Yellow colors of an image in its RGB color space**. Explain how that/those transformation function(s) will reduce excessive contrast. 5
3. Briefly explain the safe RGB color model. 5