In this document, we highlight important knowledge in Chapters 11—13.
This will be highly relevant to the final exam.

Chapter 11 Photometric Error and Direct SLAM

Pages 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 23, 31, 32, 33, 34, 35

Remark: For pages 33—35, students are required to know the main factors considered in photometric calibration. Students should focus on the concepts and can neglect details.

Chapter 12 Bundle Adjustment

Pages 03, 04, 05, 06, 07, 08, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21, 22

Remark: For pages 17, 18, 20, 21, students are required to know the main idea of each algorithm and understand the differences between various algorithms. In the exam, specific derivations will NOT be asked.

Chapter 13 Robust Estimation

Pages 02, 03, 05, 06, 07, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 31, 32

Remark: For pages 31—32, students are only required to understand the role and significance of Huber loss. No details about Huber loss will be asked in the exam.

Chapter 14 SfM and SLAM

Pages 03, 05, 09, 10, 12, 13, 14, 15, 16, 18, 20, 26, 28, 29

Remark: For pages 16 and 18, students are not required to know the details of SLAM methods.