

# MTH 507

## INTRODUCTION TO ALGEBRAIC TOPOLOGY

### ASSIGNMENT-2

SUBMISSION DATE: 14/02/2018

**Problem 1.** Solve 1, 2, 4 from §57, Chapter 9, page 355.

**Problem 2.** Solve 1 from §59, Chapter 9, page 349.

**Problem 3.** Solve 2, 5 from §60, Chapter 9, page 371.

**Problem 4.** Solve 1 from §61, Chapter 9, page 376.

**Problem 5.** Solve 2, 4 from §62, Chapter 9, page 380/381.

You do not need to submit these following problems:

**Problem 6.** Solve 8, 9, 10 from §58, Chapter 9, page 344.

**Problem 7.** Show that the fundamental group of the figure eight is not abelian.

**Text Book: Topology, James R. Munkres (Second Edition).**