

EXAM FOR “ALGEBRAIC STRUCTURES” (6ALGS)
SUMMER SEMESTER 2024/2025

QUESTIONS SET NO. 4

1.

Define ideal of a ring, and homomorphism of rings. Illustrate these notions by examples. What is a relationship between these two notions?

2.

Give an example of a group of prime order, having an element x different from 1 and such that $x^2 = 1$.

3.

Compute the automorphism group of $\mathbb{Z}/4\mathbb{Z}$.