

ASSIGNMENT 2

SCSI1013 DISCRETE STRUCTURE

SEMESTER 1 2024/2025

INSTRUCTIONS TO THE STUDENTS:

- This is a group assignment (**TWO** students/group)
- Handwritten
- Zero mark for the late submission
- Submit your assignment during class session (12/11/2024)

QUESTION

Given a relation, R on set $A = \{-2, -1, 0, 1\}$ represented by the following matrix.

	-2	-1	0	1
-2	1	0	0	0
-1	1	1	0	0
0	1	1	1	0
1	1	1	1	1

- Based on M_R , define the relation, R .
- Construct a digraph of R and state the in degree and out degree of each vertex.
- Determine whether R is symmetric?
- Determine whether R is reflexive?
- Conclude if R is equivalence or partial order?