King Saud University Section	College of Sciences Quiz 2 Math 151	Department of Mathematics Semester I (1444)
Name:	Stu	dent Number:
Q1: Let P be the relation of	n $A = \{1, 2, 3, 4, 5\}$ represent	ted by the following matrix
	$M_P = \left(egin{array}{ccccccc} 1 & 1 & 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 1 \end{array} ight)$	1))) 1
1. List all ordered pa	airs of P . (1 marks)	
2. Show that P is a	partial ordering relation. (3	marks)
3. Represent P by a	hasse diagram. (2 marks)	

Q2:	Let E be the equivalence relation defined on $B = \{a, b, c, d, e, f\}$ by $E = \{(a, a), (a, c), (a, f), (b, b), (c, a), (c, c), (c, f), (d, d), (d, e), (e, d), (e, e), (f, a), (f, c), (f, f)\}$. Find all distinct equivalence classes of E . (2 marks)
Q3:	Let G be a graph with degree-sequence: $x, x, x+1, x-1, x-2, x+2$. Find the value of x if G has 9 edges. (2 marks)