

FINAL TERM EXAMINATION
Fall 2009
MTH202- Discrete Mathematics

Question No: 1 (Marks: 1) - Please choose one

Let $A = \{a, b, c\}$ and

$R = \{(a, c), (b, b), (c, a)\}$ be a relation on A . Is R

- ▶ Transitive
- ▶ Reflexive
- ▶ **Symmetric**
- ▶ Transitive and Reflexive

Question No: 2 (Marks: 1) - Please choose one

Symmetric and antisymmetric are

- ▶ Negative of each other
- ▶ Both are same
- ▶ **Not negative of each other (Page 90)**

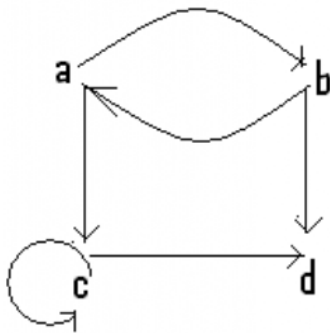
Question No: 3 (Marks: 1) - Please choose one

The statement $p \square q \square q \square p$ describes

- ▶ **Commutative Law:**
- ▶ Implication Laws:
- ▶ Exportation Law:
- ▶ Equivalence:

Question No: 4 (Marks: 1) - Please choose one

The relation as a set of ordered pairs as shown in figure is



- ▶ $\{(a,b), (b,a), (b,d), (c,d)\}$
- ▶ $\{(a,b), (b,a), (a,c), (b,a), (c,c), (c,d)\}$
- ▶ **$\{(a,b), (a,c), (b,a), (b,d), (c,c), (c,d)\}$**
- ▶ $\{(a,b), (a,c), (b,a), (b,d), (c,d)\}$

Question No: 5 (Marks: 1) - Please choose one

The statement $p \square q \square (p \square \sim q) \square c$ describes