

2002 Paper 11 Question 6

Mathematics for Computation Theory

Give a brief explanation of each of the following terms, where relevant giving an example that either fits the term or shows how it can fail to apply:

- (a) Well-founded relation;
- (b) Power-set;
- (c) Cartesian Product;
- (d) Reflexive relation;
- (e) Partial Order;
- (f) Lexicographic Order;
- (g) Disjoint Union;
- (h) Bijection;
- (i) Equivalence Relation;
- (j) Free Algebra.

[2 marks each]