

1. Record Nr.	UNINA9910824105803321
Autore	Vatsa B. S
Titolo	Discrete mathematics / / B.S. Vatsa, Suchi Vatsa
Pubbl/distr/stampa	New Delhi, : New Age International, c2009
ISBN	1-282-45031-X 9786612450310 81-224-2506-2
Edizione	[4th rev. ed.]
Descrizione fisica	1 online resource (315 p.)
Altri autori (Persone)	VatsaSuchi
Soggetti	Computer science - Mathematics Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	<p>""Cover""; ""Preface to the Fourth Edition ""; ""Contents ""; ""Chapter 1. Mathematical Logic""; ""1.1 Logical Statement or Proposition ""; ""1.2 Type of Propositions ""; ""1.3 The Propositional Calculus""; ""1.4 The Negation of a Proposition ""; ""1.5 Disjunction ""; ""1.6 Conjunction ""; ""Problem""; ""1.7 Tautologies and Contradictions""; ""1.8 Logical Equivalence ""; ""Problem 1.3""; ""1.9 The Algebra of Propositions""; ""Problem 1.4""; ""1.10 Conditional Propositions ""; ""1.11 Converse, Inverse and Contrapositive Propositions""; ""1.12 The Negation of a Conditional Proposition""</p> <p>""1.13 Biconditional Propositions""""Problem 1.5""; ""1.14 Arguments""; ""Problem 1.6""; ""Chapter 2. Set Theory""; ""2.1 Sets ""; ""2.2 Set Designation""; ""2.3 Null Sets and Unit Sets ""; ""2.4 Special Sets of Numbers ""; ""2.5 Universal Set""; ""Problem 2.1""; ""2.6 Subsets: Proper Subsets and Equal Sets ""; ""Problem 2.2""; ""2.7 Set Operations ""; ""2.8 Union Operation ""; ""2.9 Properties of Union Operations""; ""2.10 Intersection ""; ""2.11 Properties of Intersection Operation ""; ""2.12 Distributive Properties""; ""2.13 Complementation ""</p> <p>""2.14 Relative Complement (or Difference of Sets)""""2.15 Properties of Complement ""; ""2.16 Properties of Difference ""; ""2.17 Symmetric Difference""; ""Problem 2.3""; ""2.18 Power Set ""; ""Problem 2.4""; ""2.19 Cartesian Products ""; ""Problem 2.5""; ""2.20 Generalized Set</p>

Theory ""; "Problem 2.6 ""; "Chapter 3. Relation and Functions ""; "3.1 Relation ""; "Problem 3.1"; "3.2 Equivalence Relation"; "3.3 Partition"; "3.4 Partial Order Relation"; "Problem 3.2"; "3.5 Functions (Mappings)"; "Problem 3.3"; "3.6 Inverse Mapping ""; "3.7 Composition of Mappings"
"Problem 3.4""3.8 Binary Operations "", "Problem 3.5"; "3.9 Countable and Uncountable Sets ""; "Problem 3.6"; "Chapter 4. Ordered Sets and Lattices ""; "4.1 Poset ""; "4.2 Product Set and Order"; "4.3 Hasse Diagrams of Partially Ordered Sets ""; "4.4 Minimal and Maximal, and First and Last Point ""; "Problem 4.1"; "4.5 Lattices"; "4.6 Lattices and Partially Ordered Sets ""; "4.7 Principle of Quality ""; "Problem 4.2"; "4.8 Lattices as Algebraic Systems ""; "4.9 Lattice and Order"; "4.10 Sublattices"; "4.11 Direct Product of Two Lattices"
"4.12 Isomorphic Lattices""Problem 4.3"; "4.13 Complete Lattice ""; "4.14 Complemented Lattices"; "4.15 Distributive Lattice ""; "4.16 Modular Lattices ""; "Problem 4.4"; "Chapter 5. Boolean Algebra and Switching Circuits ""; "5.1 Introdction"; "Problem 5.1"; "5.2 Boolean Functions"; "5.3 Normal Form"; "5.4 Fundamental Forms of Boolean/Functions"; "Problem 5.2"; "5.5 Application to Switching Networks ""; "Problem 5.3"; "Chapter 6. Matrices ""; "6.1 Revision"; "6.2 Diagonal, Scalar, Unit and Triangular Matrix"; "6.3 Equal Matrices"
"6.4 The Transpose of Matrix: Symmetric and Skew Symmetric Matrix"
