

Discrete Mathematics and Number System

SOURCE: 01	Discrete Mathematics (GATE EXAM)
01	Discrete Mathematics Syllabus
02	Introduction to Set Theory Set, Subset, Proper Subset
03	Power Set Set Theory and Algebra
04	Relation in Set Theory with Example
05	Reflexive Relation with Example
06	How Man Reflexive Relations Possible
07	Irreflexive Relation with Example
08	Symmetric Relation with Example
09	Antisymmetric Relation with Example
10	Asymmetric vs Antisymmetric Relation with Example
11	Transitive Relation with Examples
12	Equivalence Relation in Discrete Mathematics with Examples
13	Partial Order Relation POSET in Discrete Mathematics
14	Totally Ordered Set in Discrete Mathematics
15	Comparison of All Relations Reflexive, Irreflexive, Transitive, Symmetric, Antisymmetric
16	Introduction to Group Theory
17	Algebraic Structure in Discrete Mathematics
18	Semigroup in Group Theory
19	Monoid in Discrete Mathematics Group Theory
20	Group in Discrete Mathematics with Example
21	Abelian Group in Discrete Mathematics with Example
22	Function in Discrete Mathematics
23	How Many Functions Possible Counting Functions
24	One to One Function (Injection) Injective Function
25	ONTO Function (Surjection) Surjective Function
26	Bijective Function (Bijection)
SOURCE: 02	Number System (GATE EXAM)
01	Number System in Digital Electronics
02	Convert Decimal to Any Other Base (Binary Octal Hex)
03	Convert Any Base to Decimal (Binary Octal Hex)
04	Conversion Between (Binary, Octal, Hexadecimal) Conversion Between Any Base with Power of 2
05	Question of Number System
06	What are Signed and Unsigned Number Arithmetic Operation
07	Addition in Binary, Octal, and Hexadecimal Number System
08	BCD, Excess-3 Code and conversion with Example
09	Binary to Gray Code conversion and Vice-versa
10	Floating Point Representation with Example
11	Find 1's Complement and 2's Complement
12	Complements (1's, 2's, 7's, 8's, 9's, 10's, 15's, 16's) r's Complements (r-1)'s
13	BCD Addition with Examples
14	Binary Multiplication with Example
15	Ranges of Sign Magnitude, 1's and 2's Complement
16	Introduction to Binary Code (ASCII, UNICODE, EBCDIC, BCD)
17	Self-Complementary Codes
18	Short Trick for 2's Complement
19	Short Trick for 9's and 10'sComplement
20	Short Trick for 7's and 8's Complement Short Trick
21	Binary Addition and Subtraction