Mathamatics For Computer Science - I

Swayam Prabha Course Code – R6

PROFESSOR'S NAME	Prof. Manindra Agrawal
DEPARTMENT	Department of Computer Science and Engineering
INSTITUTE	Indian Institute of Technology Kanpur
COURSE OUTLINE	Sets, relations, functions, partial orders, equivalence classes, proof techniques, Permutations, combinations, binomial coefficients, partitions, generating functions, inclusion-exclusion, Ramsey theory, Degree, paths, cycles, trees, planar graphs, Groups, rings, fields, finite fields.

COURSE DETAILS

S. No	Module ID/ Lecture ID	Lecture Title/Topic
1	**R6-Mod1**	Sets, relations, functions, partial orders, equivalence classes, proof techniques – Part 1
2	**R6-Mod2**	Sets, relations, functions, partial orders, equivalence classes, proof techniques – Part 2
3	**R6-Mod3**	Permutations, combinations, binomial coe_cients, partitions, generating functions, inclusion-exclusion, Ramsey theory – Part 1
4	**R6-Mod4**	Permutations, combinations, binomial coe_cients, partitions, generating functions, inclusion-exclusion, Ramsey theory – Part 2
5	**R6-Mod5**	Permutations, combinations, binomial coe_cients, partitions, generating functions, inclusion-exclusion, Ramsey theory – Part 3

6	**R6-Mod6**	Degree, paths, cycles, trees, planar graphs – Part 1
7	**R6-Mod7**	Degree, paths, cycles, trees, planar graphs – Part 2
8	**R6-Mod8**	Groups, rings, felds, fnite felds – Part 1
9	**R6-Mod9**	Groups, rings, felds, fnite felds – Part 2
10	**R6-Mod10**	Groups, rings, felds, fnite felds – Part 3
11	**R6-Mod11**	Groups, rings, felds, fnite felds – Part 4
12	**R6-Mod12**	Groups, rings, felds, fnite felds – Part 5
13	**R6-Mod13**	Groups, rings, felds, fnite felds – Part 6
14	**R6-Mod14**	Groups, rings, felds, fnite felds – Part 7