Teaching Plan

Name of the Faculty : Ms. Astha Goyal

Name of the Course : B.Sc.(H) Computer Science- LOCF

Semester : IInd Sec (if any) : A, B

Title of the Paper : Discrete Structures

Course Learning Outcomes

On successful completion of the course, students will be able to:

1. Define mathematical structures (relations, functions, sequences, series, and graphs) and use them to model real life situations.
2. Understand (trace) and construct simple mathematical proofs using logical arguments.
3. Solve class room puzzles based on counting principles.
4. Compare functions and relations with respect to their growth for large values of the input.

Month	Topics Covered	References
April	Introduction- Set, Relations, Functions, Permutations and Combinations Assignment- 1 Practicals:Q1,Q2,Q3,Q4,Q10,Q11	1. C.L.Liu & Mahopatra, Elements of Discrete Mathematics, 4th Edition, Tata McGraw Hill. 2. Rosen, Discrete Mathematics and its Applications, 6th Edition. 3. T.H. Coremen , Introduction to Algorithms, Prentice Hall, 3rd Edition.
May	Logic (Prepositional and Predicate), Graphs Test-1, Assignment-2 Practicals:Q12,Q13, Q16,Q17, Q18,Q19	
June	Trees, Generating Functions, Recurrence Relation, Test-2 Practicals:Q5,Q6,Q7,Q14,Q15,Q20	
July	Growth of Functions, Revision Practicals: Q8, Q9 Internal Practical Examination	

Note: 1. There will be a continuous assessment of the practical followed by an internal examination.

2. Refer to the above table for tentative dates of Assignments/Tests.