LECTURE PLAN

Name of the Faculty:	**Ms. Prachika Jindal**
Discipline:	**Bachelor of Computer Applications**
Semester:	**I**
Subject:	**Mathematical foundations for Computer Science- I**
Course Outcomes(Cos):	**Co1-** Understanding **set** operation **& laws & applying set theory** to problems solving Co2-Performing Matrix operation ,finding inverse & hence solving system of linear equations Co3 To understand the pattern & predicting the next term accordingly . Co4- Solving Differentiation & applying it to solve real life problems
Work Load (Lecture/Practical) per week (In hours):	**(3L +2 P)**

Sr. No.	Lecture No.	Topic (Including Assignment/Test/Quiz/Activity)	Pedagogy(PPT/Video Lecture/Chalk/Case-Study etc.)	Course Outcome
1	L1	**Sets and their representation**		CO1
2	L2	Finite & Infinite set ,Empty set, Equal set		CO1
3	L3	Subset, Power set ,Universal set		CO1
4	L4	Union & Intersection of set		CO1
5	L5	Difference of two set		CO1
6	L6	Complement of a set		CO1
7	L7	Venn Diagram		CO1

8	L8	De- Morgan's Law & their Application		CO1
9	L9	An introduction to Matrices & their types		CO2
10	L10	Operation on Matrices		CO2
11	L11	Transpose of a matrix		CO2
12	L12	Symmetric & skew symmetric matric		CO2
13	L13	Expression a matrix into sum of Symmetric & Skew symmetric Matrix		CO2
14	L14	**Minors & Cofactors of matrix**		CO2
15	L15	**Determinant of a matrix**		CO2

16	L16	Adjoint of Matrix		$CO2$
17	L17	Inverse of a Matrix		$CO2$
18	L18	Solution of System of linear equations upto order 3		$CO2$
19	L19	Quadratic Equation		$CO3$
20	L20	Solution of Quadratic Equation		$CO3$
21	L21	Ctd.		$CO3$
22	L22	Arithmetic progression		$CO3$
23	L23	Geometric progression		$CO3$
24	L24	Harmonic Progression		$CO3$
25	L25	**Arithmetic mean**		$CO3$

26	L26	**Geometric mean**		CO3
27	L27	Harmonic mean		CO3
28	L28	Relation Between AM ,HM & GM		CO3
29	L29	Concept of Differentiation		CO4
30	L30	Differentiation of simple function		CO4
31	L31	Ctd		CO4
32	L32	**Differentiation of Algebraic function**		CO4
33	L33	Ctd		CO4
34	L34	Differentiation of Exponential function		CO4
35	L35	Ctd		CO4

36	L36	Differentiation of Trigonometric function		CO4
37	L37	Ctd		CO4
38	L38	Application of differentiation in daily life		CO4

| 39 | L39 | Ctd | | | C04 |

40	L40			
41	L41			
42	L42			

43	L43			
44	L44			
45	L45			
46	L46			

(COURSE   INCHARGE)