Govt. College for Girls, Padha (Karnal)

Lesson Plan for Even Semester

Name of the teacher- PREETI RANI

Class- B.A.2ND SEM

Subject- MATHEMATICS

Paper-ALGEBRA AND NUMBER THEORY.

1st Week	Symmetric , Skew symmetric
2nd Week	Hermitian and Skew hermitian matrices.
3rd Week	Elementary operations on matrices.
4th Week	Rank of matrix , inverse of a matrix.
5th Week	Linear dependence and independence of rows and columns of matrix.
6th Week	Row rank and column rank of a matrix.
7th Week	Eigen values,Eigen vectors and characteristics equation of a matrix.
8th Week	Minimal polynomial of a matrix.
9th Week	Cayley-hamilton theorem and it use in finding the inverse of a matrix.
10th Week	Unitary and orthogonal matrices.
11th Week	Relation between the roots and coefficients of general polynomial equation in one variable.
12th Week	Solutions of a polynomial equations having conditions on roots,common roots and multiple roots.
13th Week	Transformation of equations, nature of the roots ,of an equation. Descarte rule of signs .
14th Week	Divisibility, greatest common divisor, least common multiple, prime numbers,fundamental theorem of arithmetic.
15th Week	Linear congruences , fermat's theorem .Euler's theorem, wilson's theorem and it's converse.
16th Week	TEST AND REVISION

17th Week	Chinese remainder theorem. Linear Diophantine equations in two variables.
18th Week	Divisibility, greatest common divisor, least common multiple, prime numbers,fundamental theorem of arithmetic
19th Week	TEST AND REVISION