LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.A. 4TH Sem

Subject:- GROUP AND RINGS

Teacher name:- MS. MEENESH KUMARI

	LESSON PLAN OF GROUP AND RINGS
April	
Week 1:	Definition of a group with example and simple properties of groups,
	Subgroups and Subgroup criteria
Week 2:	Generation of groups, cyclic groups, Cosets,
	Left and right cosets, Index of a sub-group Coset decomposition,
	Largrage's theorem and its consequences,
Week 3:	Normal subgroups, Quotient groups,
	Homoomorphisms, isomophisms,
	automorphisms and inner automorphisms of a group.
Week 4:	Automorphisms of cyclic groups,
	Permutations groups. Even and odd permutations.
	Alternating groups, Cayley's theorem, Center of a group and derived group of a group.
May	
Week 1:	Introduction to rings, subrings,
	integral domains and fields, Characteristics of a ring
	Ring homomorphisms, ideals ,Quotient rings, Field of quotients of

	an integral domain.
Week 2:	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is R[X1 , X2……Xn]
	Polynomials over the rational field, The Eisenstein's criterion,
Week 3:	Polynomial rings over commutative rings, Unique factorization domain,
	R unique factorization domain implies so is R[X1 , X2……Xn]

LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.A. 3rd Sem

Subject:-Programming in C and Numerical Methods

Teacher name:- MS. Meenesh kumari

	LESSON PLAN OF Programming in C and Numerical Methods
September:	**Strings: Character data type,Sta Standard string handling functions,Arith Arithmetic operations on characters structures Definition**
	Using structures, use of structures inarrays and arrays in structures
October:	**Pointers data type, pointers and arrays, pointers and functions, solutions of algebraic and transcendental equations: Bisection method, Regula-Falsi method, Secant method**
November:	**Newton - Raphaon's method, Newton's interative method for finding Pth root of a number, Order of convergence ofabove methods**
	Simultaneous linear algebraic equations: Gauss-dimination method, Gauss-Jordan method
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December:	**Triangulatizatio method, Court's method, Chalesky decomposition method, InterativInteractive method, Jacobi's method, Gauss- Seidel's method, Relareation method.**

LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.A.6TH Sem

Subject:- real and complex analysis

Teacher name:- MS. MEENESH KUMARI

	LESSON PLAN OF REAL AND COMPLEX ANALYSIS
April	
Week 1:	Jacobians
Week 2:	Jacobians, Beta and Gama functions
Week 3:	Double and Triple integrals,
	Dirichlets integrals
Week 4:	CHANGE OF Order of integration in double integrals.
May	
Week 1:	Extended Complex Plane, Stereographic projection of complex numbers

Week 2:	continuity and differentiability of complex functions
Week 3:	Analytic functions, Cauchy-Riemann equations, Harmonic functions.

LESSON PLAN OF PHYSICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-2023

Semester:-B.Sc/ B.A. 5thSem

Subject:- Numerical Analysis

Teacher name:- Ms. Meenesh kumari

	LESSON PLAN OF Numerical Analysis
August :	**Finite difference operators and their relations,**
	Finding the missing terms and error tabular values,
September:	**Newton 's forward and backward interpolation formulae,**
	Newton's divided difference ,lagrange's Interpolation formulae, Hermite formula
October:	**Central Differences, Gauss forward and Gauss backward interpolation formulae**
	SteelinSterling formulae and Bessel formula,
November:	probability distribution of random variables ,Binomial distribution, Poisson's distribution
	Normal distribution, Mean, Variance and Fitting
December:	Numerical Differentiation, Derivative of a function using interpolation formulae,

LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.A. 4TH Sem

Subject:- GROUP AND RINGS

Teacher name:- MS. MEENESH KUMARI

	LESSON PLAN OF GROUP AND RINGS
April	
Week 1:	Definition of a group with example and simple properties of groups,
	Subgroups and Subgroup criteria
Week 2:	Generation of groups, cyclic groups, Cosets,
	Left and right cosets, Index of a sub-group Coset decomposition,
	Largrage's theorem and its consequences,
Week 3:	Normal subgroups, Quotient groups,
	Homoomorphisms, isomophisms,
	automorphisms and inner automorphisms of a group.
Week 4:	Automorphisms of cyclic groups,
	Permutations groups. Even and odd permutations.
	Alternating groups, Cayley's theorem, Center of a group and derived group of a group.
May	
Week 1:	Introduction to rings, subrings,
	integral domains and fields, Characteristics of a ring
	Ring homomorphisms, ideals ,Quotient rings, Field of quotients of

	an integral domain.
Week 2:	Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is R[X1 , X2……Xn]
	Polynomials over the rational field, The Eisenstein's criterion,
Week 3:	Polynomial rings over commutative rings, Unique factorization domain,
	R unique factorization domain implies so is R[X1 , X2……Xn]

LESSON PLAN OF Maths

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.Sc. Non Medical 1ˢᵗ Sem

Subject:- Real And Complex Analysis

Teacher name:- Meenesh Kumari

April - (1-15)

Jacobins, chain ruler , Functional Dependence, Beta function: Properties of beta function, Another form of beta function,

(16-30)

Gamma function: Recurrence formula for Gamma function, Relation between Beta and Gamma function, Duplication formula.

Revision of ch -1,2

Test - Unit 1

May-(1-15)

Calculus of complex function: Stereographic projection of complex Numbers, complex function or function of a complex variable,limit of a complex function,continuity of a complex function,uniform continuity,Rule of differention .

(16 -31)

Analytic function,C-R EQUATION ,C-R EQUATION in polar form, Harmonic function,Construction of an Analytic functionfunction.

Revision of unit 2, Test - unit 2

LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.Sc. Non Medical 6th Sem

Subject:- Real And Complex Analysis

Teacher name:- Meenesh Kumari

April - (1-15)

Jacobins ,chain ruler , Fuctional Dependence, Beta function:Properties of beta function,Another form of beta function,

(16-30)

Gamma function:Recurrence formula for Gamma function, Relation between Beta and Gamma function, Duplication formula.

Revision of ch -1,2

Test - Unit 1

May-(1-15)

Calculus of complex function: Stereographic projection of complex Numbers, complex function or function of a complex variable,limit of a complex function,continuity of a complex function,uniform continuity,Rule of differention .

(16 -31)

Analytic function,C-R EQUATION ,C-R EQUATION in polar form, Harmonic function,Construction of an Analytic functionfunction.

Revision of unit 2, Test - unit 2

LESSON PLAN OF PHYSICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2022-23

Semester:- B.Com. 1

Subject:- Business Mathematics

Teacher name:- Meenesh kumari

	LESSON PLAN
April	
Week 1:	**Introduction to Syllabus and Pattern**
	Algebra of matrices ,Basic operations on matrixs, Transpose of matrix, Symmetric and Skew symmetric ,
	Chapter -1 Revision
Week 2:	**Determinants ,Minors and co--factors,properties of Determinants.**
	Chapter 2 problems
Week 3:	**Matrices,Adjoint of a matrix,Inverse of a square matrix,Application of Matrices to simple business and economic problems.**
	Problems, Revision of chapter -1,2,3
	Test Unit 1
Week 4:	**Compound interest: Simple interest, General formulae for Determination of compound interest,continuous compounding interest**
week 5:	**problems on effective of interest, Depreciation**

	and population,
May	
Week 1:	Differentiation,derivative of 1st principle, Differention of product of two functions, Derivative of functions of a function (chain Rule) and Exponential and logarithmic
	Differentiation in case of Parametric function,derivative of higher order,
	Test --Ch. 6
Week 2:	Permutations Differentiation between permutation and combination, Permutation When all the object are distinct, Restricted permutation
	permutation with repetitions, some theorems on combination,
Week 3:	**Sequence and Series,Arithmetic progression,Sum of n terms of an A.P.**
	Arithmetic Mean ,Sum of n Arithmetic means between two Number.
Week 4:	**Geometric Progression,Sum of first n terms G.P.SP.Sum of G.P. up to infinity.**
	Unit 4 problems and Revision
	Test of Unit 2nd