GOVERNMENT COLLEGE BHATTU KALAN

DEPARTMENT OF MATHEMATICS

SESSION 2025-26

LESSON PLAN

BSC/BA-5TH SEMESTER

GROUP AND RING(BM-352)

Name of the Assistant Professor: Dr. Kirti Chaudhary

Week	Date	Topics
1	July 24-31	Defination of group with Example
2	August 1-9	Subgroup and subgroup criteria
3	August 11-16	Cyclic groups
4	August 18-23	Langrages Theorem and its consequence
5	August 25-30	Homomorphism
6	September 1-5	Auto morphism and inner automorphism of a group
7	September 8-13	Permutations groups
8	September 15-20	Cayleys theorem,Centre of a group and derived group
9	September 22-30	Introduction to ring and subring
10	October 1-8	Integral domain and field
11	October 9-17	Ideals
12	October 27-31	Fields of Quotient of an integral domain
13	November 1-8	Euclidean Ring
14	Novemer 10-15	Polynomial Ring
15	November 17-22	Criteria of irreducibility
16	November 24-29	Polynomial ring over commutative ring
		Unique Factorization Domain

Bsc/BA 5th SEMESTER

Real Analysis(BM 351)

Name of the Assistant Professor: Dr. Kirti Chaudhary

Week	Date	Topics
1	July 24-31	Riemann integral
2	August 1-9	Integrability of continuous and monotonic function
3	August 11-16	Fundamental theorem of calculus
4	August 18-23	Mean value theorem
5	August 25-30	Improper integral
6	September 1-5	Comparisons test
7	September 8-13	Integral as a function of parameter
8	September 15-20	Continuity
9	September 22-30	Differentiability and integrability of an integral operator
10	October 1-8	Definition and examples of metric spaces
11	October 9-17	Neighbouhhood
12	October 27-31	Interior points and closed sets
13	November 1-8	Cauchy sequence
14	Novemer 10-15	Completeness
15	November 17-22	Contraction principle
16	November 24-29	Continuous function
17		Components

BSC/BA-5TH SEMESTER

NUMERICAL ANALYSIS(BM353)

Name of the Assistant Professor: Dr Kirti Chaudhary

Week	Date	Topics
1	July 24-31	Finite difference operator
2	August 1-9	Interpolation with equal operator
3	August 11-16	Interpolation with unequal operator
4	August 18-23	Langarges interpolation formula
5	August 25-30	Central differences
6	September 1-5	Probability
7	September 8-13	Normal distribution
8	September 15-20	Mean variance and fitting
9	September 22-30	Numerical differentiation
10	October 1-8	Eigen value problem
11	October 9-17	Lanczos method
12	October 27-31	Numerical integration
13	November 1-8	Gauss quadrature formula
14	Novemer 10-15	Numerical solution of ODE
15	November 17-22	Eulers method
16	November 24-29	Milne Thomson method
17		Implementation of numerical method

BSC SEMESTER 1

COMPUTER SKILLS (SEC 101)

Name of the Assistant Professor: DR Kirti cahudhary

Week	Date	Topics
1	August week 1	Windows
2	Week 2	My computer
3	Week 3	System tray
4	Week 4	Key board accelerators
5	Week 5	Working with notepad and word pad
6	September week 1	MS word formatting documents
7	Week 2	Setting paragraph style
8	Week 3	Borr and shading
9	Week 4	Header and footer
10	October week 1	Table of contents
11	Week 2	Creating table
12	Week 3	Drawing inserting clip arts
13	Week 5	Mail merge
14	November week 1	MS excel working with spread sheets
15	Week 2	Inserting functions
16	Week 3	Mathematical operations
17	Week 4	Formatting spread sheet

BSC/BA-3RD SEMESTER

Differential Equation (DSC 201)

Name of the Assistant Professor: DR Kirti chaudhary

Week	Date	Topics
1	July 24-31	Basic concepts of ordinary differential equation
2	August 1-9	Exact differential equation
3	August 11-16	Clairauts forms and singular solution
4	August 18-23	Orthogonal trajectories
5	August 25-30	Solution of linear ordinary differential equation with constant coefficient
6	September 1-5	Method of reduction of order
7	September 8-13	Variation of parameter
8	September 15-20	Cauchy euler equation
9	September 22-30	Simultaneous differential equatin
10	October 1-8	Linear and non linear PDE
11	October 9-17	Langrages method of PDE
12	October 27-31	Integral surface passes through given curve
13	November 1-8	Ompatible systems of first order equation
14	Novemer 10-15	Charpits method
15	November 17-22	Jacobi method
16	November 24-29	Partial differential equation with constant coeficients
17		

BSC/BA-1ST SEMESTER

CALCULUS (DSC 101)

Name of the Assistant Professor: Dr Kirti chaudhary

Week	Date	Topics
1	July 24-31	Limit and continuity of a real valued function
2	August 1-9	Types of discontinuity
3	August 11-16	Indeterminate form
4	August 18-23	Successive differentiation
5	August 25-30	Leibtniz rule
6	September 1-5	Taylors and maclaurin theorem
7	September 8-13	Asymptotes
8	September 15-20	Asymptotes of polar curves
9	September 22-30	Curvature and radius of curvature
10	October 1-8	Newtons method
11	October 9-17	Multiple points
12	October 27-31	Test of concavity and convexity
13	November 1-8	Tracing of curves
14	Novemer 10-15	Rectification
15	November 17-22	Area bounded by closed curve
16	November 24-29	Volume and surface of solids of revolution
17		Revision

<p style="text-align:center">Bsc **3rd   SEMESTER**</p>

QUANTITATIVE APTITUDE (SEC 202)

Name of the Assistant Professor: Dr. KIRTI CHAUDHARY

Week	Date	Topics
1	August week 1	Linear equation
2	Week 2	Quadratic equation
3	Week 3	Problem on ages
4	Week 4	Clocks
5	Week 5	Time and distance
6	September week 1	Work and time
7	Week 2	Simple interest
8	Week 3	Partner ship
9	Week 4	Trigonometric rations
10	October week 1	Height and distance
11	Week 2	Permutation
12	Week 3	Comination
13	Week 5	Events and sample space
14	November week 1	Probability
15	Week 2	Raw and grouped data
16	Week 3	Bar graph ,pie chart
17	Week 4	mean mode median

Bcom -1ST SEMESTER

Business Mathematics

Name of the Assistant Professor: Dr. KIRTI CHAUDHARY

Week	Date	Topics
1	August week 1	Natural number, prime number, real number
2	Week 2	Integers HCF and LCM
3	Week 3	Problems on multiplication ,Division addition
4	Week 4	HCF and LCM
5	Week 5	Meaning and types of equation
6	September week 1	Linear equation
7	Week 2	Simultaneous equation
8	Week 3	Elimination method and substitution method
9	Week 4	Percentages
10	October week 1	Type of ratios
11	Week 2	Proportions
12	Week 3	Cross product property
13	Week 5	Commercial mathematics
14	November week 1	Equated due date interest
15	Week 2	Algebra of matrices
16	Week 3	Adjoint of matrices
17	Week 4	Simple business and economics problem of marices