

# Govt. College, Safidon (Jind)-126112

Session: 2021-22 (Even Semester)

B.Sc/B.A-Ist

## Lesson Plan

Name of the Teacher: Sanyogita

Subject: maths

Sr. No.	Months	Topic
1	April	vector spaces and subspaces
2		Basis and Dimension
3		Quotient space
4	May	Linear Transformations
5		Rank and Nullity
6		Algebra of Linear Transformations
7		Dual Spaces, Bidual Spaces,
8		annihilators of subspaces of finite dim. VS
9	June	Matrix of linear Transformations
10		Singular and non-singular
11		linear transformations
12		eigen values and eigen vectors of
13		linear transformations
14	July	Inner product spaces,
15		Cauchy-Schwarz inequality, orthogonal
16		vectors, orthogonal complements,
17		orthogonal sets, Basis, Bessel's Inequality
18		for finite dimensional vector spaces

Sanyogita  
Signature

## Lesson Plan

B.Sc. BSC/B.A. - II<sup>nd</sup>

Name of the Teacher: Sanyogita

Subject: Maths

sr. No.	Months	Topic
1	April	Boundedness of the set of real numbers,
2		least upper bound, greatest lower bound of
3		a set, interior points, isolated points, limit points
4	May	open sets, closed set, interior of a
5		set closure of a set in real no.
6		Real sequences and their convergence,
7	June	Theorems on limits of sequence, bounded
8		and monotonic sequences, Cauchy's
9		sequence, Infinite series
10	July	Comparison tests of positive term infinite
1		series, convergence and divergence
2		of geometric series, P-series,
3	July	Ratio test, Raabe's test, logarithmic test
4		de Morgan and Bertrand's test
5		Leibnitz's test, absolute and conditional
6		convergence, Abel's lemma, Abel's test,
		Dirichlet's test, Dirichlet's Theorem

Signature

Lesson Plan

Name of the Teacher: Sanyogita

Subject: Maths

Sr. No.	Months	Topic
1	April	Geometrical meaning of a Differential equation, Exact Differential equations, integrating factors.
2		Lagrange's equations, Clairaut's equations
3		orthogonal trajectories in Cartesian coordinates and polar coordinates, self orthogonal family of curves.
4	May	Linear Differential equations with constant coefficients.
5		Homogeneous Linear ordinary Differential equations
6		Linear differential equations of 2nd order.
7		Reduction to normal form.
8	June	Transformation of the equation by changing the dependent variable / I.D variable.
9		Method of variations of parameters.
10		Method of undetermined coefficients.
11	July	Ordinary simultaneous differential equations.
12		Sol: of simultaneous diff equations involving operators $x(d/dx)$ or $t(d/dt)$
13		General method of solving $Pdx + Qdy + Rdz = 0$
14		
15		
16		
17		
18		

Sanyogita  
Signature

Lesson Plan

Name of the Teacher:

Sanyogita

Subject:

maths

Sr. No.	Months	Topic
1	April	Jacobians, Beta and Gamma functions
2		double and Triple integrals, Dirichlet's
3		integrals. change of order of integration in double Integrals
4	May	Fourier's Series:
5		Fourier expansion of piecewise monotonic
6		functions, Properties of Fourier coefficient
7		Dirichlet's conditions, Parseval's
8		identity for Fourier series
9	June	Extended Complex plane,
10		Stereographic projection of Complex
11		numbers, continuity and differentiability
12		of Complex functions, Analytic function
13		Cauchy-Riemann equation
14	July	Translation, Rotation,
15		Magnification and Inversion,
16		Conformal mappings, Mobius Transformation
17		Fixed points, Inverse points and
18		Critical mappings

Sanyogita  
Signature

Govt. College, Safidon (Jind)-126112

Modern Publishers

Lesson Plan :-

Session: (2021-22)

B.Com-I

Name of the Teacher: Sanyogita

Subject: Business Maths-II

Sr. No.	Months	Topic
1	April	Permutations and combinations
2		Binomial Theorem
3		
4	May	Linear Inequalities in
5		Two variables
6		
7		Linear Programming
8		
9	June	Data - Introduction, Classification
10		and Tabulation
11		
12		
13		
14	July	Diagrammatic Representation of
15		data, graphical representation
16		of data, data Interpretation
17		
18		

Sanyogita  
Signature