TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR Mrs. Pooja

CLASS AND SECTION B.A/B.Sc. Intgr. IInd Sem.

SUBJECT Calculus

WEEK 1	DESCRIPTION
5-1-26	
6-1-26	
7-1-26	
8-1-26	
9-1-26	
10-1-26	
WEEK 2	
12-1-26	
13-1-26	
14-1-26	
15-1-26	
16-1-26	Introduction of limit and continuity
17-1-26	Discontinuity and its types
WEEK 3	
19-1-26	En. 1.1
20-1-26	"
21-1-26	Continuous functions
22-1-26	"
24-1-26	examples of 1.2
WEEK 4	
27-1-26	en. 1.2
28-1-26	Differentiability of function
29-1-26	examples of 1.3
30-1-26	en - 1.3
31-1-26	"
WEEK 5	
2-2-26	Introduction of Successive Differentiation
3-2-26	en - 2.1
4-2-26	"
5-2-26	Results for nth Derivatives
6-2-26	2.2
7-2-26	
WEEK 6	

Date	Topic
9-2-26	Leibnitz's theorem. 2.
10-2-26	9.9
11-2-26	'1
13-2-26	2.5 Calculation of nth Derivative at $u=0$
14-2-26	

WEEK 7

Date	Topic
16-2-26	Introduction of indeterminate forms
17-2-26	en. 3.1
18-2-26	exercise. 3.1
19-2-26	L'Hospital rule to evaluate the indeterminate form.
20-2-26	en. 3.2
21-2-26	

WEEK 8

Date	Topic
23-2-26	exercise. 3.3
24-2-26	General theorems on differentiable function
25-2-26	exercise - 4.1
26-2-26	Taylor's infinite Series
27-2-26	exercise. 4.2
28-2-26	

WEEK 9

Date	Topic
9-3-26	Tangents and Normals
10-3-26	exercise. 5.1
11-3-26	"
12-3-26	equation of Tangent
13-3-26	exercise 5.2
14-3-26	

WEEK 10

Date	Topic
16-3-26	Angle of intersection of two curves.
17-3-26	5.3
18-3-26	Length of tangent
19-3-26	en. 5.4
20-3-26	en - 5.5
21-3-26	

WEEK 11

Date	Topic
24-3-26	Finite and infinite branches of a curve.
25-3-26	exercise - 6.1
27-3-26	en - 6.2
28-3-26	

WEEK 12

Date	Topic
30-3-26	Intrinsic equation of a curve.
31-3-26	exercise - 7.1
1-4-26	exercise - 7.2
2-4-26	exercise - 7.3
3-4-26	" - 7.4

Date	Topic
4-4-26	
WEEK 13	
6-4-26	Introduction to curve tracing
7-4-26	exercise - 8.1
8-4-26	Tracing of cartesian curves
9-4-26	exercise - 8.2
10-4-26	Parametric equations
11-4-26	
WEEK 14	
13-4-26	exercise - 8.3
15-4-26	Limit and continuity of functions
16-4-26	exercise - 9.1
17-4-26	"
18-4-26	
WEEK 15	
20-4-26	Partial Differentiation
21-4-26	example - 10.1
22-4-26	exercise - 10.1
23-4-26	Homogeneous functions.
24-4-26	ex - 10.2
25-4-26	
WEEK 16	
27-4-26	Test
28-4-26	Composite functions.
29-4-26	10.3
30-4-26	Directional Derivative
1-5-26	"
2-5-26	
WEEK 17	

Date	Topic
4-5-26	exercise - 11.1
5-5-26	Level Surfaces.
6-5-26	exercise - 11.2

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR ....Mimansha....

CLASS AND SECTION ....BA - BSc. IInd Yr. (4th Sem.)

SUBJECT ....Real Analysis....

WEEK 1	DESCRIPTION
5-1-26	
6-1-26	
7-1-26	
8-1-26	
9-1-26	
10-1-26	
WEEK 2	
12-1-26	Practical
13-1-26	,,
14-1-26	Introduction
15-1-26	,,
16-1-26	Practical
17-1-26	,,
WEEK 3	
19-1-26	Sets & Subsets
20-1-26	Finite & Infinite Sets
21-1-26	Some theorems of Finite & Infinite Sets
22-1-26	Boundedness of Sets
24-1-26	Least Upper Bound or Supremum
WEEK 4	
27-1-26	Greatest Lower Bound or Infimum
28-1-26	Completeness Property of Reals
29-1-26	Archimedean Property of Reals
30-1-26	Exercise 1.1
31-1-26	Onto Function
WEEK 5	
2-2-26	One - One Function
3-2-26	One-One Onto Function
4-2-26	Denumerable Set
5-2-26	Countable Set
6-2-26	Theorem (Galileo's Paradox)
7-2-26	Theorem → Every infinite subset of a denumerable set is denumerable
WEEK 6	

Date	Topic
9-2-26	Theorem → If A and B are two denumerable sets, then A × B is denumerable
10-2-26	Theorem → Union of two countable sets is countable
11-2-26	Exercise → 2.1
13-2-26	Partition
14-2-26	Upper and Lower Sums

WEEK 7

Date	Topic
16-2-26	Theorem
17-2-26	"
18-2-26	"
19-2-26	Reimann Integral
20-2-26	Exercise → 3.1
21-2-26	Darbouz's Theorem

WEEK 8

Date	Topic
23-2-26	Conditions of Integrability
24-2-26	Theorem
25-2-26	Integrability of continuous function
26-2-26	Theorem for Integrability of Monotic Function
27-2-26	Second Definition of Integrability
28-2-26	Exercise → 3.2

WEEK 9

Date	Topic
9-3-26	Properties of Reimann Integral
10-3-26	Theorems on Continuity and Differentiability
11-3-26	Primitive of a Function
12-3-26	Fundamental Theorem of Integral Calculus
13-3-26	Mean Value Theorems of Integral Calculus
14-3-26	Exercise → 3.3

WEEK 10

Date	Topic
16-3-26	Improper Integrals → Types & Convergence
17-3-26	Exercise → 4.1
18-3-26	Comparison Tests for convergence of $\int_a^b f\,dx$ at 'a'
19-3-26	Exercise → 4.2
20-3-26	General Test for Convergence of $\int_a^b f\,dx$ at 'a'
21-3-26	Exercise → 4.3

WEEK 11

Date	Topic
24-3-26	General Test for Convergence at ∞
25-3-26	Exercise → 4.4
27-3-26	Frullani's Integral
28-3-26	Exercise → 4.5

WEEK 12

Date	Topic
30-3-26	Introduction
31-3-26	Continuity of the Integral
1-4-26	Derivability of the Integral
2-4-26	Integrability of an Integral of a function of Parameter
3-4-26	Exercise → 5.1

Date	Topic
4-4-26	Exercise → 5.1

WEEK 13

Date	Topic
6-4-26	Jacobians
7-4-26	Chain Rule for Jacobian
8-4-26	Exercise → 6.1
9-4-26	Functional Dependence
10-4-26	Theorem
11-4-26	Exercise → 6.2

WEEK 14

Date	Topic
13-4-26	Beta Function & Its Properties
15-4-26	Exercise → 7.1
16-4-26	Gamma Function
17-4-26	Exercise → 7.3
18-4-26	Test

WEEK 15

Date	Topic
20-4-26	Double Integral & Its Evaluation
21-4-26	Exercise → 8.1
22-4-26	Triple Integral & Its Evaluation
23-4-26	Exercise → 8.2
24-4-26	Test
25-4-26	Application of Double & Triple Integrals

WEEK 16

Date	Topic
27-4-26	Exercise → 8.3
28-4-26	Dirichlet's Integral
29-4-26	Exercise → 8.4
30-4-26	Test
1-5-26	Change of Order of Integration
2-5-26	Exercise → 8.5

WEEK 17

Date	Topic
4-5-26	Doubt Class
5-5-26	Revision Class
6-5-26	Doubt Class

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR ..... Mrs. Geeta .....

CLASS AND SECTION ..... B.A./B.sc. 6th Sem .....

SUBJECT ..... Linear Algebra .....

WEEK 1	DESCRIPTION
5-1-26	Introduction of Vector spaces,
6-1-26	Vector spaces, subspaces,
7-1-26	Sum & Direct sum of subspaces.
8-1-26	Linear span
9-1-26	
10-1-26	
WEEK 2	
12-1-26	Introduction of Linearly Independent
13-1-26	subsets of Vector space.
14-1-26	finitely generated Vector spaces.
15-1-26	,,
16-1-26	
17-1-26	
WEEK 3	
19-1-26	Existence thm for basic verctor space
20-1-26	finite dimensional Vector spaces,
21-1-26	Invariance of the number of elements
22-1-26	,,
24-1-26	
WEEK 4	
27-1-26	Introduction of Dimensions.
28-1-26	Quotient space
29-1-26	,,
30-1-26	Dimension of Quotient space
31-1-26	
WEEK 5	
2-2-26	Introduction of Homomorphism
3-2-26	Isomorphism of Vector spaces.
4-2-26	Linear transformation
5-2-26	Linear forms on Vector spaces.
6-2-26	
7-2-26	
WEEK 6	

Date	Topic
9-2-26	Dual Spaces.
10-2-26	Bidual Spaces.
11-2-26	Annihilator of subspaces.
13-2-26	
14-2-26	

WEEK 7

Date	Topic
16-2-26	Null space,
17-2-26	Range space of a linear transformation.
18-2-26	"
19-2-26	Revision
20-2-26	
21-2-26	

WEEK 8

Date	Topic
23-2-26	Rank of Vector spaces.
24-2-26	"
25-2-26	Nullity Thm.
26-2-26	Some examples.
27-2-26	
28-2-26	

WEEK 9

Date	Topic
9-3-26	Introduction of Algebra of Linear Transformation.
10-3-26	"
11-3-26	Minimal Polynomial of Linear Transformation.
12-3-26	Singular Linear transformation.
13-3-26	
14-3-26	

WEEK 10

Date	Topic
16-3-26	Non-Singular Linear transformation.
17-3-26	"
18-3-26	Test
19-3-26	Matrix of a linear transformation.
20-3-26	~~Etron~~.
21-3-26	

WEEK 11

Date	Topic
24-3-26	Change of basis
25-3-26	"
27-3-26	Introduction of Eigen values.
28-3-26	

WEEK 12

Date	Topic
30-3-26	Eigen vectors of Linear Transformation.
31-3-26	"
1-4-26	Revision
2-4-26	Test
3-4-26	

Date	Topic
4-4-26	
WEEK 13	
6-4-26	Introduction of Inner product spaces.
7-4-26	Cauchy-Schwarz inequaity.
8-4-26	"
9-4-26	Orthogonal Vectors.
10-4-26	
11-4-26	
WEEK 14	
13-4-26	Orthogonal Vectors
15-4-26	Orthogonal Complements.
16-4-26	Orthogonal sets & Basis,
17-4-26	"
18-4-26	
WEEK 15	
20-4-26	Bessel's inequality for finite dimensional
21-4-26	"
22-4-26	Gram-Schmidt orthogonalization process.
23-4-26	"
24-4-26	
25-4-26	
WEEK 16	
27-4-26	Adjoint of a linear Transformation.
28-4-26	Revision.
29-4-26	Unitary linear transformation.
30-4-26	"
1-5-26	
2-5-26	

WEEK 17

Date	Topic
4-5-26	Revision
5-5-26	Test
6-5-26	Problems

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR .....Mrs. Priya.............

CLASS AND SECTION .....B.A./B.Sc.-IIIrd (Sem-8th).....

SUBJECT .....Real And Complex Analysis.....

WEEK 1	DESCRIPTION
5-1-26	Introduction of Jacobian ft.
6-1-26	Solve Ex=1.1
7-1-26	
8-1-26	
9-1-26	Beta ft. , Ex=2.1
10-1-26	Ex=2.1
WEEK 2	
12-1-26	Gamma functions , Examples.
13-1-26	Ex=2.2
14-1-26	
15-1-26	
16-1-26	Introduction of Double Integral
17-1-26	Ex=3.1
WEEK 3	
19-1-26	Triple integrals , Ex=3.2
20-1-26	Ex=3.3
21-1-26	
22-1-26	Dirichlet's integrals , Ex=3.4
24-1-26	Ex=3.4
WEEK 4	
27-1-26	change of order of integration.
28-1-26	Ex=3.5
29-1-26	
30-1-26	Test
31-1-26	Revision.
WEEK 5	
2-2-26	Fourier's Series , Ex=4.1
3-2-26	Ex=4.1
4-2-26	
5-2-26	
6-2-26	fourier expansion of piecewise monotonic ft.
7-2-26	properties of fourier Coefficient.
WEEK 6	

Date	Topic
9-2-26	Dirichlet's Condition, Ex=4.2.
10-2-26	Ex=4.2.
11-2-26	
13-2-26	Test
14-2-26	Doubt class

WEEK 7

Date	Topic
16-2-26	Parseval's identity for Fourier Series.
17-2-26	odd & even ft's of Fourier Series.
18-2-26	
19-2-26	
20-2-26	Half range series, Ex=4.3
21-2-26	change of intervals., Ex=4.3

WEEK 8

Date	Topic
23-2-26	Test
24-2-26	Revision.
25-2-26	
26-2-26	
27-2-26	Introduction of Complex Plane.
28-2-26	Stereographic projection of Complex numbers.

WEEK 9

Date	Topic
9-3-26	Continuity Ex=5.1
10-3-26	Differentiability of Complex ft's, Ex=5.1
11-3-26	
12-3-26	
13-3-26	Introduction of Analytic ft's.
14-3-26	C-R equations, Ex=5.2

WEEK 10

Date	Topic
16-3-26	Revision
17-3-26	Test
18-3-26	
19-3-26	
20-3-26	Harmonic ft's.
21-3-26	Ex=5.2!

WEEK 11

Date	Topic
24-3-26	Revision
25-3-26	
27-3-26	Test
28-3-26	Doubt class

WEEK 12

Date	Topic
30-3-26	Introduction of elementary functions
31-3-26	Translations, Examples.
1-4-26	
2-4-26	
3-4-26	Rotation of elementary functions.

Date	Topic
4-4-26	Magnification & Inversion , Ex = 6.1
WEEK 13	
6-4-26	Conformal mappings , Examples.
7-4-26	Ex = 6.1
8-4-26	
9-4-26	
10-4-26	Mobius Transformations , examples.
11-4-26	fixed points , Ex = 6.2
WEEK 14	
13-4-26	Test
15-4-26	
16-4-26	
17-4-26	Cross ration & Inverse points.
18-4-26	Examples, Ex = 6.2
WEEK 15	
20-4-26	Introduction of Critical mapping.
21-4-26	Examples
22-4-26	
23-4-26	
24-4-26	Ex = 7.1
25-4-26	''
WEEK 16	
27-4-26	Test
28-4-26	Doubt class
29-4-26	
30-4-26	
1-5-26	Revision.
2-5-26	''
WEEK 17	

Date	Topic
4-5-26	Test
5-5-26	Problems.
6-5-26	

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR .....Dr. Sonia.................................

CLASS AND SECTION .....B.A/ B.Sc 6th sem...........................

SUBJECT ....Dynamics...

WEEK 1	DESCRIPTION
5-1-26	
6-1-26	
7-1-26	
8-1-26	
9-1-26	
10-1-26	
WEEK 2	
12-1-26	Practical
13-1-26	Introduction
14-1-26	Velocity and aculeration
15-1-26	"
16-1-26	Velocity along radial & transverse
17-1-26	"
WEEK 3	
19-1-26	Velocity along tangential & normal directions
20-1-26	"
21-1-26	"
22-1-26	"
24-1-26	Theorems based on aculeration
WEEK 4	
27-1-26	Simple Harmonic Motion
28-1-26	"
29-1-26	"
30-1-26	"
31-1-26	Exercise 3.1
WEEK 5	
2-2-26	Exercise 3.2
3-2-26	"
4-2-26	Eg's of S.H.M.
5-2-26	"
6-2-26	Exercise 3.3
7-2-26	"
WEEK 6	

Date	Topic
9-2-26	Elastic strings
10-2-26	"
11-2-26	egs of elastic string
13-2-26	"
14-2-26	"

WEEK 7

Date	Topic
16-2-26	Introduction of Mass
17-2-26	Definition of momentum and Force
18-2-26	"
19-2-26	"
20-2-26	Newton's Law of motion
21-2-26	"

WEEK 8

Date	Topic
23-2-26	Exercise 5.1
24-2-26	"
25-2-26	Exercise 5.2
26-2-26	"
27-2-26	"
28-2-26	Exercise 5.3

WEEK 9

Date	Topic
9-3-26	egs based on Newton's Law of motion.
10-3-26	"
11-3-26	"
12-3-26	Introduction of Work,
13-3-26	Definition of Work, Power and Energy
14-3-26	"

WEEK 10

Date	Topic
16-3-26	Energy and its types.
17-3-26	Definition of Conservative Forces
18-3-26	Conservative forces
19-3-26	"
20-3-26	Impulsive forces
21-3-26	"

WEEK 11

Date	Topic
24-3-26	Motion on smooth and rough plane curves.
25-3-26	"
27-3-26	"
28-3-26	"

WEEK 12

Date	Topic
30-3-26	Test
31-3-26	Revision of motion on smooth and rough plane curves.
1-4-26	"
2-4-26	"
3-4-26	Projectile motion of a particle in a plane

Date	Topic
4-4-26	Projectile motion
WEEK 13	
6-4-26	Vector Angular velocity.
7-4-26	"
8-4-26	"
9-4-26	"
10-4-26	Exercise
11-4-26	"
WEEK 14	
13-4-26	Introduction of General motion of a rigid body
15-4-26	"
16-4-26	Central orbits
17-4-26	"
18-4-26	"
WEEK 15	
20-4-26	Kepler's Laws of motion
21-4-26	"
22-4-26	"
23-4-26	"
24-4-26	Motion of a particle in 3-Dimension d
25-4-26	"
WEEK 16	
27-4-26	Acceleration in terms of different Co-ordinate system
28-4-26	"
29-4-26	"
30-4-26	"
1-5-26	"
2-5-26	"
WEEK 17	
4-5-26	Revision
5-5-26	"
6-5-26	"

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR ...... Mimansha ......

CLASS AND SECTION ...... B.A., BCOM – Ist Yr. (2nd Sem)

SUBJECT ...... MDC (Mathematical Reasoning)

WEEK 1	DESCRIPTION
5-1-26	
6-1-26	
7-1-26	
8-1-26	
9-1-26	
10-1-26	
WEEK 2	
12-1-26	
13-1-26	
14-1-26	
15-1-26	
16-1-26	
17-1-26	
WEEK 3	
19-1-26	Analogy
20-1-26	Ex – 1.1
21-1-26	Series Completion
22-1-26	
24-1-26	
WEEK 4	
27-1-26	Ex – 1.2
28-1-26	Coding Decoding
29-1-26	
30-1-26	
31-1-26	
WEEK 5	
2-2-26	Ex – 1.3
3-2-26	Sequential Output Tracing.
4-2-26	Ex – 1.4
5-2-26	
6-2-26	
7-2-26	
WEEK 6	

Date	Topic
9-2-26	
10-2-26	
11-2-26	
13-2-26	
14-2-26	
WEEK 7	
16-2-26	Ex-1.5
17-2-26	Logical Venn Diagram
18-2-26	No., Ranking & Time Seq. Test
19-2-26	
20-2-26	
21-2-26	
WEEK 8	
23-2-26	Ex-1.6
24-2-26	Revision
25-2-26	Ex-1.7
26-2-26	
27-2-26	
28-2-26	
WEEK 9	
9-3-26	Blood Relation
10-3-26	Ex-1.8
11-3-26	Revision
12-3-26	
13-3-26	
14-3-26	
WEEK 10	
16-3-26	Test
17-3-26	Ex-1.9
18-3-26	Mathematical Operators
19-3-26	
20-3-26	
21-3-26	
WEEK 11	

Date	Topic
24-3-26	Ex-1.10
25-3-26	Revision
27-3-26	
28-3-26	
WEEK 12	
30-3-26	
31-3-26	Ex-2.1
1-4-26	Logical Sequence of Words
2-4-26	Ex-2.2
3-4-26	

4-4-26	
WEEK 13	
6-4-26	Ex - 2.3
7-4-26	Arithmetical Reasoning
8-4-26	Ex - 2.4
9-4-26	
10-4-26	
11-4-26	
WEEK 14	
13-4-26	Test
15-4-26	Ex - 2.5
16-4-26	
17-4-26	
18-4-26	
WEEK 15	
20-4-26	Ex - 3.1
21-4-26	Data Interpretation
22-4-26	Ex - 3.2
23-4-26	
24-4-26	
25-4-26	
WEEK 16	
27-4-26	Ex - 3.3
28-4-26	Venn Diagrams
29-4-26	Ex - 3.4
30-4-26	
1-5-26	
2-5-26	
WEEK 17	

4-5-26	Analytical Reasoning
5-5-26	Ex - 3.5
6-5-26	Mirror Images

TIKA RAM GIRLS COLLEGE SONEPAT

Lesson Plan Format

NAME OF ASSISTANT/ASSOCIATE PROFESSOR Dr. Sonia

B.Sc 1st year 2nd sem

CLASS AND SECTION SEC Numerical Analysis

SUBJECT ....

WEEK 1	DESCRIPTION
5-1-26	
6-1-26	
7-1-26	
8-1-26	
9-1-26	
10-1-26	
WEEK 2	
12-1-26	
13-1-26	
14-1-26	
15-1-26	Practical
16-1-26	Introduction to finite difference operators
17-1-26	''
WEEK 3	
19-1-26	Relations of operators.
20-1-26	Finding the missing terms & effect of error.
21-1-26	''
22-1-26	''
24-1-26	Interpolation with equal intervals.
WEEK 4	
27-1-26	Newton's forward formula.
28-1-26	Questions based on formula.
29-1-26	''
30-1-26	''
31-1-26	''
WEEK 5	
2-2-26	
3-2-26	
4-2-26	
5-2-26	Newton's backward formula.
6-2-26	''
7-2-26	''
WEEK 6	

Date	Topic
9-2-26	
10-2-26	
11-2-26	Lagrange's Interpolation Formula.
13-2-26	Hermite Formula.
14-2-26	

WEEK 7

Date	Topic
16-2-26	
17-2-26	
18-2-26	Central differences - Introduction,
19-2-26	Gauss forward
20-2-26	"
21-2-26	"

WEEK 8

Date	Topic
23-2-26	
24-2-26	
25-2-26	
26-2-26	Gauss backward Formulae
27-2-26	"
28-2-26	"

WEEK 9

Date	Topic
9-3-26	
10-3-26	
11-3-26	
12-3-26	Probability distribution of random Variables
13-3-26	"
14-3-26	"

WEEK 10

Date	Topic
16-3-26	
17-3-26	
18-3-26	
19-3-26	Binomial distribution,
20-3-26	Poisson's distribution,
21-3-26	Normal distribution,

WEEK 11

Date	Topic
24-3-26	
25-3-26	
27-3-26	Numerical differentiation
28-3-26	"

WEEK 12

Date	Topic
30-3-26	
31-3-26	
1-4-26	Derivation of, f_n
2-4-26	"
3-4-26	"

Date	Topic
4-4-26	Eigen Value Problem.
WEEK 13	
6-4-26	
7-4-26	
8-4-26	
9-4-26	Power Method.
10-4-26	"
11-4-26	Jacobi's Method.
WEEK 14	
13-4-26	
15-4-26	
16-4-26	Numerical Integration.
17-4-26	Trapezoidal rule.
18-4-26	Simpson's one third.
WEEK 15	
20-4-26	Simpson's 3-eighth rule -
21-4-26	
22-4-26	
23-4-26	
24-4-26	Chebychev formula.
25-4-26	"
WEEK 16	
27-4-26	
28-4-26	
29-4-26	
30-4-26	Gauss quadrature formula
1-5-26	"
2-5-26	"
WEEK 17	

Date	Topic
4-5-26	
5-5-26	Revision
6-5-26	Revision