SIR C R REDDY COLLEGE FOR WOMEN, ELURU

Annual Curricular Plan for the Academic Year 2022 - 2023

Name of the Lecturer :	E.T.D. SOWJANYA				
Name of the Department:	MATHEMATICS				
Program	I B.SC			Group:	I MSCS
Title of the Course:	THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY			Hrs allotted:	60+30
Year	2022-23	Semester	II SEMESTER	Course Code:	21-BA228/ 21-BS232
Section	MSCS			Hours/Week	6+2

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT -1 : THE PLANE	1,2	Thursday	1-6-2023	syllabus & model papers	P1	—
	3	Friday	2-6-2023	Equation of plane in terms of its intercepts on the axes	P1	—
	4	Saturday	3-6-2023	Equation of plane in terms of its intercepts on the axes	P1	—
	5	Monday	5-6-2023	Equation of the plane through the given points	P1	—
	6,7	Tuesday	6-6-2023	Equation of the plane through the given points	P1	—
	8	Wednesday	7-6-2023	ASSIGNMENT	P4	—
	9,10	Thursday	8-6-2023	Length of the perpendicular from a given point to a given Plane	P1	—
	11	Friday	9-6-2023	Practial (The Planes)	P1	—
	12	Monday	12-6-2023	Bisectors of angles between two planes	P1	—
	13,14	Tuesday	13-6-2023	Combined equatin of two planes	P1	—
	15	Wednesday	14-6-2023	Orthogonal Projection on a Plane	P1	—
	16,17	Thursday	15-6-2023	QUIZ	P7	—
	18	Friday	16-6-2023	Practial (Pair of Planes)	P1	—

UNIT 2:THE LINE	19	Saturday	17-6-2023	Practical (Image of the Lines)	P1	—
	20	Monday	19-6-2023	Angle between a Line & a Plane	P1	—
	21,22	Tuesday	20-6-2023	The Condition that a given line may lie in a given plane	P3	—
	23	Wednesday	21-6-2023	The Condition that a given line may lie in a given plane	P1	—
	24,25	Thursday	22-6-2023	The Condition that two given lines are coplanar	P4	—
	26	Friday	23-6-2023	Practical (Coplanarity of Lines)	P1	—
	27	Saturday	24-6-2023	Practical (Coplanarity of Lines)	P1	—
	28	Monday	26-6-2023	GROUP DISCUSSION	P8	—
	29,30	Tuesday	27-6-2023	The Shortest Distance between two lines	P1	—
	31	Wednesday	28-6-2023	The Length & equations of the line of Shortest Distance between two straight lines	P3	—
	32	Friday	30-6-2023	Practical (Shortest Distance between the Lines)	P1	—
	33	Saturday	1-7-2023	Practical (Shortest Distance between the Lines)	P1	—
UNIT-3 :THE SPHERE	34	Monday	3-7-2023	Definition and Equation of the Sphere, Equation of the sphere through four given points	P1	—
	35,36	Tuesday	4-7-2023	Equation of the sphere through four given points	P1	—
	37	Wednesday	5-7-2023	QUIZ	P7	—
	38,39	Thursday	6-7-2023	Plane sections of a sphere, Intersection of two spheres	P1	—
	40	Friday	7-7-2023	Practical (Plane Section of the Spheres)	P1	—
	41	Monday	10-7-2023	Equation of a circle, Sphere through a given circle	P1	—
	42,43	Tuesday	11-7-2023	Sphere through a given circle	P1	—
	44	Wednesday	12-7-2023	SEMINAR	P5	—
	45,46	Thursday	13-7-2023	Intersection of a sphere and a line	P3	—

	47	Friday	14-7-2023	Practical (The Tangent Planes)	P1	—
	48	Saturday	15-7-2023	Practical (The Tangent Planes)	P3	—
	49	Monday	17-7-2023	Polar plane, Pole of Contact	P1	—
	50,51	Tuesday	18-7-2023	Pole of Contact	P1	—
	52	Wednesday	19-7-2023	ASSIGNMENT	P4	—
	53,54	Thursday	20-7-2023	Conjugate Planes	P1	—
UNIT-4: THE SPHERE AND CONE	55	Friday	21-7-2023	Angle of Intersection of two spheres, Condition for two Spheres to be Orthogonal	P1	—
	56	Saturday	22-7-2023	Radical Plane	P1	—
	57	Monday	24-7-2023	Radical Plane	P1	—
	58,59	Tuesday	25-7-2023	Coaxial System of Spheres	P1	—
	60	Wednesday	26-7-2023	SEMINAR	P5	—
	61,62	Thursday	27-7-2023	Limiting Points	P1	—
	63	Friday	28-7-2023	Practical (Limiting Points of the coaxial System)	P1	—
	64	Monday	31-7-2023	Equation of the Cone with given Vertex and Guiding Curve	P1	—
	65,66	Tuesday	1-8-2023	Equation of the Cone with Vertex at origin are homogeneous	P1	—
	67	Wednesday	2-8-2023	Condition that the General Equation of the second degree should represent a cone	P3	—
	68,69	Thursday	3-8-2023	Enveloping cone of a Sphere, Right circular Cone	P1	—
	70	Friday	4-8-2023	QUIZ	P7	—
	71	Saturday	5-8-2023	Practical (Limiting Points of the coaxial System)	P1	—
	72	Monday	7-8-2023	GROUP DISCUSSION	P8	—
	73,74	Tuesday	8-8-2023	Equation of the right circular cone with a given vertex & semi vertical angle	P1	—

UNIT- 5: CONES	75	Wednesday	9-8-2023	Condition that a cone may have three mutually perpendicular generators	P1	—
	76,77	Thursday	10-8-2023	Intersection of a line and a quadric cone	P1	—
	78	Friday	11-8-2023	Practical (Reciprocal Cone)	P1	—
	79	Monday	14-8-2023	Intersection of a line and a quadric cone	P1	—
	80	Wednesday	16-8-2023	ASSIGNMENT	P4	—
	81,82	Thursday	17-8-2023	Tangent lines and Tangent Plane at a point	P1	—
	83	Friday	18-8-2023	Condition that a plane may touch a cone	P1	—
	84	Saturday	19-8-2023	Condition that a plane may touch a cone	P1	—
	85	Monday	21-8-2023	Reciprocal cones	P3	—
	86,87	Tuesday	22-8-2023	Reciprocal cones	P1	—
	88	Wednesday	23-8-2023	Intersection of two cones with a common vertex	P1	—
	89	Thursday	24-8-2023	SEMINAR	P5	—
	90	Friday	25-8-2023	Intersection of two cones with a common vertex	P1	—

E. Tajani Sanjaya
Signature of the Lecturer

S.S.L. Sabarik
Signature of the HOD

Signature of the Principal

P1-Lecture P2-Demonstration P3-Auido,Video P4-Assignment P5-Seminar P6-Debate

P7-Quiz P8-Group Discussion P9-Jam P10-PPT

SIR C R REDDY COLLEGE FOR WOMEN, ELURU

Annual Curricular Plan for the Academic Year 2022 - 2023

Name of the Lecturer :	**M.B.RAJYALAKSHMI**				
Name of the Department:	**MATHEMATICS**				
Program	**II B.Sc**			**Group:**	**MPC**
Title of the Course:	**LINEAR ALGEBRA**			**Hrs allotted:**	**60**
Year	**2022 - 2023**	**Semester**	**IV**	**Course Code:**	**21-BS432-B**
Section	**MPC - II**			**Hours/Week**	**6**

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT -I Vector Spaces-I	1	Monday	27-03-2023	Syllabus & Model papers	P1	–
	2	Tuesday	28-03-2023	vector spaces ,General properties of vector spaces,n-dimensional vectors Addition and Scalar Multiplication of vectors	P1	–
	3	Wednesday	29-03-2023	Internal and External Composition ,Null space,	P1	–
	4	Friday	31-03-2023	Null space, Vector Subspaces	P1	–
	5	Saturday	01-04-2023	Vector Subspaces	P1	–
	6	Monday	03-04-2023	Algebra of Subspaces	P3	–
	7	Tuesday	04-04-2023	Linear sum of two subspaces	P1	–
	8	Thursday	06-04-2023	Linear combinations of vectors ,Linear spaces	P1	–
	9	Monday	10-04-2023	SEMINAR	P5	–
	10	Tuesday	11-04-2023	Linear combinations of vectors ,Linear span	P1	–

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT -I Vector Spaces-I	11	Wednesday	12-04-2023	Linear Independance and Linear dependence of vectors	P1	–
	12	Thursday	13-04-2023	Linear Independance and Linear dependence of vectors	P1	–
UNIT-II Vector Spaces-II	13	Saturday	15-04-2023	Basis of vector space ,Finite dimensional Vector Spaces	P1	–
	14	Monday	17-04-2023	Basic Extension,Co-ordinates	P1	–
	15	Tuesday	18-04-2023	QUIZ	P7	–
	16	Wednesday	19-04-2023	Basic Extension,Co-ordinates	P1	–
	17	Thursday	20-04-2023	Dimension of a Vector Space	P1	–
	18	Friday	21-04-2023	Dimension of a Vector Space	P3	–
	19	Monday	24-04-2023	Dimension of a SubSpace	P1	–
	20	Tuesday	25-04-2023	Dimension of a SubSpace	P1	–
	21	Wednesday	26-04-2023	GROUP DISCUSSION	P8	–
	22	Thursday	27-04-2023	Quotient Space and Dimension of a Quotient Space	P1	–
	23	Friday	28-04-2023	Quotient Space and Dimension of a Quotient Space	P1	–
	24	Saturday	29-04-2023	Quotient Space and Dimension of a Quotient Space	P1	–
UNIT -III Linear Transformations	25	Monday	01-05-2023	Linear Transformations,Linear Operators	P1	–
	26	Tuesday	02-05-2023	Properties of Linear Transformations	P1	–

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT -III Linear Transformations	27	Wednesday	03-05-2023	Properties of Linear Transformations	P1	–
	28	Thursday	04-05-2023	PPT	P10	–
	29	Friday	05-05-2023	Sum and Product of Linear Transformations	P1	–
	30	Saturday	06-05-2023	Range and Nullspace of Linear Transformations	P1	–
	31	Monday	08-05-2023	Range and Nullspace of Linear Transformations	P1	–
	32	Tuesday	09-05-2023	Rank and Nullity of Linear Transformations	P1	–
	33	Wednesday	10-05-2023	Rank and Nullity of Linear Transformations	P1	–
		11/5/2023 - 31/5/2023 SUMMER HOLIDAYS				
	34	Thursday	01-06-2023	Rank Nullity Theorem	P1	–
	35	Friday	02-06-2023	SEMINAR	P5	–
	36	Saturday	03-06-2023	Rank Nullity Theorem	P1	–
UNIT -IV Matrix	37	Monday	05-06-2023	Linear Equations	P1	–
	38	Tuesday	06-06-2023	Linear Equations	P1	–
	39	Wednesday	07-06-2023	Characterstic Equations	P3	–
	40	Thursday	08-06-2023	QUIZ	P7	–
	41	Friday	09-06-2023	Characterstic values and Vector of square Matrix	P1	–
	42	Monday	12-06-2023	Characterstic values and Vector of square Matrix	P1	–

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT -IV Matrix	43	Tuesday	13-06-2023	Characterstic values and Vector of square Matrix	P1	–
	44	Wednesday	14-06-2023	Characterstic values and Vector of square Matrix	P1	–
	45	Thursday	15-06-2023	Cayley-Hamilton theorem	P1	–
	46	Friday	16-06-2023	ASSIGNMENT	P4	–
	47	Saturday	17-06-2023	Cayley-Hamilton theorem	P1	–
	48	Monday	19-06-2023	Cayley-Hamilton theorem	P1	–
UNIT -V Inner Product Space	49	Tuesday	20-06-2023	Inner Product Spaces	P3	–
	50	Wednesday	21-06-2023	Euclidean and Unitary Spaces, Norm or Length of a vector	P1	–
	51	Thursday	22-06-2023	Schwartz inequality	P1	–
	52	Friday	23-06-2023	PPT	P10	–
	53	Saturday	24-06-2023	Triangle Inequality ,Parallelogram Law	P1	–
	54	Monday	26-06-2023	Orthogonality,Orthonormal set	P1	–
	55	Tuesday	27-06-2023	Orthogonality,Orthonormal set	P1	–
	56	Wednesday	28-06-2023	Gram-Schmidt Orthogonalisation Process,	P1	–
	57	Friday	30-06-2023	SEMINAR	P5	–
	58	Saturday	01-07-2023	Gram-Schmidt Orthogonalisation Process,	P1	–
	59	Monday	03-07-2023	Bessel's inequality	P1	–
	60	Tuesday	04-07-2023	Parseval's identity	P1	–

M.B. Rajput
Signature of the Lecturer

S.S.L. Sabarad
Signature of the HOD

Signature of the Principal

P1-Lecture P2- Demonstration P3-Audio,Video P4-Assignment P5-Seminar P6-Debate

P7-Quiz P8-Group Discussion P9-Jam P10-PPT

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Annual Curricular Plan for the Academic Year 2022 - 2023

Name of the	B TEJASWINI				
Name of the	MATHEMATICS				
Program	II B. SC			Group:	MPCS
Title of the	MATHEMATICS REAL ANALYSIS			Hrs allotted:	60
Year	2022 - 2023	Semester	IV	Course Code:	21 - BS 432 - A
Section	MPCS - I			Hours/Week	6

Unit No. & Name	Hour	Day	Date	Topic to be Covered	Methodology Adopted	Remarks
UNIT - I Real Sequences	1	Monday	27-03-2023	Syllabus & Model papers	P1	—
	2	Tuesday	28-03-2023	Introduction of the Real numbers	P1	—
	3	Wednesday	29-03-2023	sequences and their limits	P1	—
	4	Friday	31-03-2023	Range and Boundedness of sequences	P1	—
	5	Saturday	01-04-2023	Limit of a sequence and convergent sequence	P1	—
	6	Monday	03-04-2023	Limit of a sequence and convergent sequence	P1	—

	7	Tuesday	04-04-2023	The Cauchy's criterion, properly Divergent sequences	P1	—
	8	Thursday	06-04-2023	Monotone sequences	P1	—
	9	Monday	10-04-2023	Necessary and sufficient condition for convergence of Monotone sequence	P1	—
	10	Tuesday	11-04-2023	Limit point of sequence, sub sequences	P3	—
	11	Wednesday	12-04-2023	Cauchy sequences	P1	—
	12	Thursday	13-04-2023	cauchy's general principle of convergence theorem	P1	—
UNIT - II Infinite Series	13	Saturday	15-04-2023	Introduction to series, convergence of series, Cauchy's general principle of convergence for series	P1	—
	14	Monday	17-04-2023	Test for convergence of series	P1	—
	15	Tuesday	18-04-2023	SEMINAR	P5	—
	16	Wednesday	19-04-2023	series of non-negative terms	P1	—
	17	Thursday	20-04-2023	p - test	P1	—
	18	Friday	21-04-2023	p - test	P1	—

	19	Monday	24-04-2023	Cauchy's n th root test or Root test	P1	—
	20	Tuesday	25-04-2023	Cauchy's n th root test or Root test	P1	—
	21	Wednesday	26-04-2023	D' - Alembert's test or Ratio test	P1	—
	22	Thursday	27-04-2023	ASSIGNMENT	P4	—
	23	Friday	28-04-2023	Alternating series - Leibnitz test	P1	—
	24	Saturday	29-04-2023	Alternating series - Leibnitz test	P1	—
UNIT - III Continuty	25	Monday	01-05-2023	Limits : Real valued functions, Boundedness of a function, Limits of functions	P3	—
	26	Tuesday	02-05-2023	Some extensions of the limit concept, Infinite limits, Limits at infinity	P1	—
	27	Wednesday	03-05-2023	Continuous functions : Continuous functions	P1	—
	28	Thursday	04-05-2023	Continuous functions	P1	—
	29	Friday	05-05-2023	QUIZ	P7	—
	30	Saturday	06-05-2023	Combinations of continuous functions	P1	—

	31	Monday	08-05-2023	Combinations of continuous functions	P1	–
	32	Tuesday	09-05-2023	Combinations of continuous functions	P1	–
	33	Wednesday	10-05-2023	Continuous functions on interval	P1	–
				summer holidays 11-05-2023 to 31-05-2023	P1	–
	34	Thursday	01-06-2023	Continuous functions on interval	P1	–
	35	Friday	02-06-2023	GROUP DISCUSSION	P8	–
	36	Saturday	03-06-2023	Continuous functions on interval	P3	–
UIIT -IV Differentiation and Mean value theorems	37	Monday	05-06-2023	The derivability of a function, on an interval, at a point	P1	–
	38	Tuesday	06-06-2023	Derivability and Continuity of a function	P1	–
	39	Wednesday	07-06-2023	Derivability and Continuity of a function	P1	–
	40	Thursday	08-06-2023	SEMINAR	P5	–
	41	Friday	09-06-2023	Graphical meaning of the Derivative	P1	–

	42	Monday	12-06-2023	Graphical meaning of the Derivative	P1	—
	43	Tuesday	13-06-2023	Mean value theorems, Rolle's theorem	P1	—
	44	Wednesday	14-06-2023	Rolle's theorem	P1	—
	45	Thursday	15-06-2023	ASSIGNMENT	P4	—
	46	Friday	16-06-2023	Lagrange's theorem	P3	—
	47	Saturday	17-06-2023	Cauchy's Mean value theorem	P1	—
	48	Monday	19-06-2023	Cauchy's Mean value theorem	P1	—
UINT - V Riemann Integration	49	Tuesday	20-06-2023	Riemann integral, Riemann integral functions	P1	—
	50	Wednesday	21-06-2023	Darboux theorem	P1	—
	51	Thursday	22-06-2023	QUIZ	P7	—
	52	Friday	23-06-2023	Necessary and sufficient condition for R - Integrability	P1	—
	53	Saturday	24-06-2023	Necessary and sufficient condition for R - Integrability	P1	—

	54	Monday	26-06-2023	Properties of Integrable functions	P1	—
	55	Tuesday	27-06-2023	Properties of Integrable functions	P1	—
	56	Wednesday	28-06-2023	GROUP DISCUSSION	P8	—
	57	Friday	30-06-2023	Fundamental theorem of integral calculus	P1	—
	58	Saturday	01-07-2023	Fundamental theorem of integral calculus	P3	—
	59	Monday	03-07-2023	First Mean value theorem	P1	—
	60	Tuesday	04-07-2023	First Mean value theorem	P1	

Signature of the Lecturer

Signature of the HOD

Signature of the Principal

P1-Lecture P2-Demonstration P3-Audio,Video P4-Assignment

P5-Seminar P6-Debate P7-Quiz P8-Group Discussion P9-Jam P10-PPT