Name:.	GEETA DEVI DO	epartment:. Sanskrit	Class: B.A. Pass. 1S	Th Sem. Sub:- mdc
Month	1st Week	2nd Week	3rd Week	4th week
	Admission	Admission	Students Introduction	MDC विषय परचर्चा एवं महत्व
JULY				
	सौन्दर्य-शास्त्र स्वरूप,	सौन्दर्य शास्त्र का महत्त्व	सौन्दर्य के पर्यायवाची शब्दों की	Revision TEST
August	परिभाषा स्वरूप	एवं घटक १म, कप, वच,	चर्चा, लावण्य चारुता, कान्ति,	
		हृदय	माध्यं	
September	सौन्दयू अनुभव की	रस के घटक मामय की	अनुभाव सान्त्रिक भाव, रसिक,	Revision, ASSIGNMENT, TEST
optember	प्रक्रिया Essay writting	भावनाएँ और संवेदनाए	भाव स्थायी	
	सौन्दर्य तत्त्व कला -	अभिव्यक्ति का माध्यम	काव्य और नाटक	काव्य और नाटक
October	वास्तुकला मूर्ति कला	एवं संगीत Quiz, Debate	DIWALI BREAK	Assignment
	चित्रकला			
November	भारतीय सौन्दर्य शास्त्र	भरत, भामह वामन	अभिनवगुप्त विश्वनाथ ,	Revision GROUP DISCUSSION
November	के प्रमुख विचारक,	आनन्दवर्धन, राजशेखर	रुपगोस्वामी, जमा नगन्नाथ	
		मम्मर		

Month	A DEVI Departme	2nd Week	3rd Week	4th Week
	Admission	Admission	Students Introduction	यज्ञ का अर्थ
JULY				
August	यज्ञ का प्रयोजन	यज्ञ का महत्व	यनीय साहित्य कल्प	Revision TEST
September	ब्रह्म यज्ञ	ब्रह्म मुझे यस यत	ब्रह्मयज्ञ का विधि	Revision, देवयज्ञ
October	देवभूत्र का स्वरूप	देवयज्ञ श्री विधि	बलिवैश्वदेव, Revision	स्वरुप एव विधि
November	पितृसन कध स्वरूप	अती यज्ञ स्वरुप एव विधि	DIWALI BREAK	Revision TEST

Month	1st Week	2nd Week	Class: B.A. Pass. 1ST <sup>h</sup> Sem.  3rd Week	Sub:- DSC 4th Week
JULY	Admission	Admission	Students Introduction	संधि परिचय
August	हल सन्धि, विसर्ग संधि	संस्कृत व्यवहार, साहस्त्री 1- 2	संस्कृत व्यवहार, साहस्त्री-3,4,5	संस्कृत व्यवहार, साहस्त्री-6,7,8
September	हितोपदेश कभामुख	काक, मूषिका कथा शब्दरूप-राम कृषि, भानू	काक, मूषिका कथा शब्दरूप- पितृ, मति लता	शब्द रूप मति धेन्,Revision, Debate
an and school gradience chromosophic and engine (a promise pro-	The state of the s	राज्यरम राजा चृत्रम, जाजू	ानतु, नात पता	eriterika internetasi termentari et et emmentari minerikapambasan ya esisseyi interneta menerika menerika inte
October .	मृग -कूर्म कथा शब्द रूप मृत फल	मृग -कूर्म कथा शब्द रूप- फल ़	Diwali Break	मृग कर्म कथा, Revision
November	पालि प्राकृत तथा अपभंश भाषाए	आधुनिकभारतीय भाषाएँ	संस्कृत भाषाओं को प्रदाय	Revision TEST

Month	A DEVI Department:.	2nd Week	B.A. Pass. 1STh Sem. Sul	o:- AEC
JULY	Admission	Admission	3rd Week Students Introduction	4th Week भाषा विज्ञान का सामान्य परिच
August	भोषा का महत्व	भाषा का उद्भव एवं विकास	भाषा परिवार	Revision, Test
September	भारतीय परिवार , सामान्य परिचय	भारतीय-भाषा-परिवार वर्णन	भारत-ईरानी शाखा Role Play	Revision, Debate
October	वैदिक एवं लौकिक संस्कृत सामान्य परिचय, · Speech	वैदिक संस्कृत उसका साहित्य	Diwali Break	लौकिक संस्कृत उसका साहित्य
November	पालि प्राकृत तथा अपभ्रंश भाषाए	आधुनिकभारतीय भाषाएँ	संस्कृत भाषाओं को प्रदाय	Revision, Test

Name:. GEETA DEVI Department:. Sanskrit Class:. B.A. Pass. 5th Sem. Sub:- SKT Elective

Month	1st Week	2nd Week	3rd Week	4th Week
JULY	Admission	Admission		
August	Unit – 4 स्त्री प्रत्यय	Unit – 4 स्त्री प्रत्यय	Unit – 3 सं.सा. का इतिहास संहिता	Unit — 3 सं.सा. का इतिहास ब्राह्मण ग्रंथ
September	Unit – 3 सं.सा. का इतिहास आरण्यक	Unit = 3 सं.सा. का इतिहास वेदाङ्ग	Unit — 2 अभिज्ञानशाकुन्तल अंक 1	Unit — 2 ् अभिज्ञानशाकुन्तल अंक 1- 2
October	Unit – 2 अभिज्ञानशाकुन्तल अंक 2	Unit - 2 अभिज्ञानशाकुन्तल अंक 3	DIWALI BREAK	Unit – 2 अभिज्ञानशाकुन्तल अंक 4
November	पुनरावृत्ति Unit – 1	पुनरावृत्ति Unit – 4	पुनरावृत्ति Unit - 3	पुनरावृत्ति

Month	1st Week	ent:. Sanskrit  2nd Week	Class: -B.A. Pass. 5 <sup>th</sup> Sem.	Sub:- SKT Compulsory 4th Week	
<b>JULY</b> Admission		Admission	Unit – 4 कारक	Unit – 4 उपपद विभक्ति	
August	Unit – 3 सं.सा. का इतिहास कालिदास	Unit — 3 सं.सा. का इतिहास अश्वघोष	Unit — 3 सं.सा. का इतिहास भारवि	Unit — 3 सं.सा. का इतिहास भर्तृहरि	
September	Unit – 2	Unit — 2	Unit — 2	Unit – 2	
	नीतिशतक	नीतिशतक	• नीतिशतक	नीतिशतक	
October	Unit — 1	Unit – 1	DIWALI	Unit – 1	
	शिवराजविजय	शिवराजविजय	BREAK	शिवराजविजय	
November	पुनरावृत्ति	पुनरावृत्ति	पुनरावृत्ति	पुनरावृति	
	Unit – 4	Unit – 3	Unit – 2	Unit - 1	

(JULY 2025 to NOVEMBER 2025)

Name- Giri Raj Department- Sanskrit Class- B.A 2nd yr (3rd Sem ) Sub:- DSC Sanskrit

Month	1st Week	2nd Week	3rd Week	4th Week
July	Admission	Admission	णिजन्त व सन्नन्त धातुरूप	तद्धित प्रत्यय
August	तत्पुरुष समास	अव्ययीभाव समास	अनुवाद एवं कारकों का प्रयोग	अनुवाद एवं लकार एवं प्रत्ययों का प्रयोग
September	संस्कृत व्यवहारसाहस्री 17-18	संस्कृत व्यवहारसाहस्री 11-20	संस्कृत व्यवहारसाहस्री 21	संस्कृत व्यवहारसाहस्री 15-16
October	रामायण प्रथम सर्ग 1-20	रामायण प्रथम सर्ग 21-40	SEMESTER BREAK	रामायण प्रथम सर्ग 41-60
November	रामायण प्रथम सर्ग 61-80	रामायण प्रथम सर्ग 81-100	रामायण एवं समास पुनरावृत्ति	अनुवाद एवं व्यावहार साहस्री पुनरावृत्ति

Signature

#### TEACHING PLAN 2025-26 (ODD SEMESTER) (July 2025 to November 2025)

Name- Giri Raj Sub:- MIC Sanskrit **Department-** Sanskrit Class- B.A 1st yr (1st Sem) 3rd Week 1st Week 2nd Week 4th Week Month यण्, दीर्घ, गुण, वृद्धि स्वर सन्धि पररूप, पूर्वरूप आदि स्वर July सन्धि Admission Admission मातृ और पितृ, सर्व के बालक, कवि, साधु,जल पद्य भाग 1-3 पद्य भाग 4-6 August के शब्दरूप शब्दरूप पठ् और स्था धातु पांचो लकारों में भू धातुरूप पांचो लकारों वद और गम धातु पांचो गद्य भाग 1-3 लकारों में September दीपावली पर्व और सामिसत्र गद्यभाग 4-6 गद्यभाग 6-8 गद्यभाग 9-10 October अवकाश धातु,शब्दरूप पुनरावृत्ति गद्य,पद्य भाग पुनरावृत्ति अनुवाद में लकारों का अनुवाद में कारकों का प्रयोग November प्रयोग

Signature

#### TEACHING PLAN 2025-26 (ODD SEMESTER) (July 2025 to November 2025)

Name- Giri Raj **Department-** Sanskrit Class- B.Sc 1st yr (1st Sem) Sub:- AEC Sanskrit 1st Week 3rd Week 2nd Week 4th Week Month भाषा की परिभाषा एवं भाषा का उद्भव July Admission Admission भाषा का महत्व August भारोपीय भाषा परिवार भाषा का विकास भाषा परिवार भारत–ईरानी शाखा वैदिक संस्कृत तथा लौकिक संस्कृत तथा पालि भाषा लौकिक संस्कृत एवं September वैदिक संस्कृत उसका साहित्य उसका साहित्य आधुनिक भारतीय भाषाएं अपभ्रंश भाषाएं सामिसत्र अवकाश पाकृत भाषा October आधुनिक भारतीय भाषाएं संस्कृत का आधुनिक संस्कृत का आधुनिक भारतीय भाषाओं को प्रदाय पुनरावृत्ति एवं चर्चा भारतीय भाषाओं को November प्रदाय

(July 2025 to November 2025)

Name: Giri Raj Department: Sanskrit Class: B.A 2nd yr (3<sup>rd</sup> Sem)

Sub: MDC Sanskrit (भारतीय दर्शन की मूल अवधारणाएं) Subject Code- 25SKTX03MD01

Month	1st Week	2nd Week	3rd Week	4th Week
July	Admission	Admission	Unit -1 कठोपनिषद् प्रथम वल्ली 1-10	Unit-1 कठोपनिषद् प्रथम वल्ली 11-20
August	Unit-1 कठोपनिषद् प्रथम वल्ली 21-29	Unit-2 Unit-2 about 1-8 Unit-2 कठोपनिषद् द्वितीय वल्ली कठोपनिषद् द्वितीय 9-16		Unit-2 कठोपनिषद् द्वितीय वल्ली 17-25
September	Unit-3 तर्क संग्रह (द्रव्य)	Unit-3 तर्क संग्रह (गुण)	Unit-3 तर्क संग्रह (कर्म, सामान्य, विशेष)	Unit-३ तर्क संग्रह (समवाय, अभाव)
October	Unit-4 तर्क संग्रह (पृथ्वी)	Unit-4 तर्क संग्रह (जल)	सामिसत्र अवकाश	Unit-4 तर्क संग्रह (तेज)
November	Unit-4 तर्क संग्रह (वायु आकाश)	Unit-4 तर्क संग्रह (काल, दिक्)	Unit-4 तर्क संग्रह (आत्मा, मन)	पुनरावृत्ति

#### TEACHING PLAN 2025-26 (ODD SEMESTER) (July 2025 to November 2025)

Name: Giri Raj Department: Sanskrit Class: B.A 2nd yr (3<sup>rd</sup> Sem) Sub: MIC Sanskrit

Month	1st Week	2nd Week	3rd Week	4th Week
July	Admission	Admission	Unit – 3 णिजन्त प्रत्यय	Unit – 3 कृदन्त प्रत्यय
August	Unit – 3 कृदन्त प्रत्यय	Unit – 4 अव्ययीभाव समास	Unit — 4 अव्ययीभाव समास	Unit – 4 द्वन्द्व समास
September	Unit – 4 तत्पुरुष समास	Unit – 4 तत्पुरुष समास	Unit – 5 अनुवाद बहुव्रीही समास	Unit – 5 अनुवाद बहुव्रीहि समास
October	Unit — 1 चारुदत्त नाटक अंक 1-2	Unit — 1 चारुदत्त नाटक अंक 2	सामिसत्र अवकाश	Unit — 2 चारुदत्त नाटक अंक 2-3
November	Unit – 2 चारुदत्त नाटक अंक 3	Unit — 2 चारुदत्त नाटक अंक 3-4	Unit — 2 चारुदत्त नाटक अंक 4	Unit — 1-4 पुनरावृत्ति

#### TEACHING PLAN 2025-26 (ODD SEMESTER) (July 2025 to November 2025)

Name: Giri Raj Department: Sanskrit Class: B.A 2nd yr (3<sup>rd</sup> Sem)

Sub: SEC Sanskrit (पर्व परिचय) Subject Code- 25SKT403SE01

Month	1st Week	2nd Week	3rd Week	4th Week
July	Admission	Admission	Unit-1 वैदिक पर्व का अर्थ एवं परिचय	Unit-1 वैदिक पर्व का महत्व एवं प्रयोजन
August	Unit-1 वैदिक पर्व के प्रकार	Unit-2 सांस्कृतिक पर्व नवसंवत्सरेष्टि	Unit-2 सांस्कृतिक पर्व श्रावणी	Unit-2 सांस्कृतिक पर्व विजयदशमी
September	Unit-2 सांस्कृतिक पर्व शारदीय नवसस्येष्टी (दीपावली)	Unit-2 सांस्कृतिक पर्व वासन्ती नवसस्येष्टी (होली)	Unit-3 सामाजिक पर्व राम नवमी	Unit-3 सामाजिक पर्व हरी तृतीया (तीज)
October	Unit-3 सामाजिक पर्व कृष्णजन्माष्ट्रमी	Unit-3 सामाजिक पर्व विविध जयन्ति	सामिसत्र अवकाश	Unit-4 राष्ट्रीय पर्व गणतन्त्र दिवस
November	Unit-4 राष्ट्रीय पर्व स्वतन्त्रता दिवस	Unit-4 राष्ट्रीय पर्व शहीदी दिवस	Unit-4 राष्ट्रीय पर्व अन्य विशिष्ट दिवस	Unit-4 राष्ट्रीय पर्व अन्य विशिष्ट दिवस

**Department: Mathematics** 

Name :- Jyotika dudeja, Savita

Sub:- Function and Algebra (B.sc.I year)

Month	1st Week	2nd Week	3rd Week	4th Week	5 <sup>th</sup> Week
			Relation, Functions	Invertibility and	Relation between
			along with domain	inverse of functions,	the roots and
July			and Range,	One –to- one	coefficients of
July			Composition of	correspondence and	general polynomial
			function	the cardinality of a	equation in one
				set.	variable.
	Solutions of	Common roots and	Transformation of	Nature of the roots	Descarte Rule of
August	polynomial	multiple roots.	equations.	of an equation	Sign.
	equations having				
	conditions on roots				
	Solutions of cubic	Solutions of cubic	Matrix and its	. Matrix and its	Rank of a Matrix
	equations	equations	Types.	Types.	and its Applications
September	(Cardon's method). Biquadratic equations and their solutions.	(Cardon's method). Biquadratic equations and their solutions.			
October	Row rank, column rank	Elementary operations on matrices	Normal form, PAQ Form	Linera independence and dependence of rows and columns of matrices	Theorem on consistency of a system of linear rquations.

	Cayley Hamilton Theorem , Minimal	Characteristics equation of a matrix,		
November	polynomial of a Matrix	To find the inverse of a Matrix		

Name: POOJA TANWAR , MAMTA

**Subject: Ordinary Differential Equations (MAJOR)** 

Class: B.Sc. Physical Science

Month/Week	1st	2 <sup>nd</sup>	3rd	4th	5th
JULY			Geometrical	Integrating	Lagrange and
			meaning of a	Factors, First	Clairaut's
			differential	order higher	Equation,
			equation,	degree	Equation
			Exact	equations	reducible to
			differential	solvable for	Clairaut's
			equation	x,y,p.	form,
					Singular form
AUGUST		Orthogonal	Linear	Homogeneous	Equations
		Trajectories:	ordinary	linear	reducible to
		Cartesian and	differential	ordinary	Homogeneous
		Polar	equations	differential	
		coordinates,	with constant	equations	
		Self-	coefficients		
		Orthogonal			
		Family of			
		curves			
SEPTEMBER	Linear	Transformation	Solution by	Reduction of	Method of
	differential	of the equation	operators of	order of a	variations of
	equations of	by changing	non-	differential	parameters
	second order	the dependent/	homogeneous	equation	
	: Reduction	independent	linear		

	to normal	variable	differential		
	form		equations		
OCTOBER	Method of undetermined coefficients	Ordinary simultaneous differential equations	Solution of simultaneous differential equation involving operators $x(d/dx)$ or $t(d/dt)$ ,	Diwali Break	Simultaneous equation of the form dx/P= dy/Q =dz//R
NOVEMBER		Total differential equation, Condition for P dx + Q dy + R dz = 0 to be exact	Diwali Break General method of solving P dx + Q dy + R dz = 0 by taking one variable constant	Method of auxiliary equations	

Name :- Jyotika Dudeja Sub:- GROUPS AND RING

CLASS: B.Sc Physical Science (III YEAR)

Month	1st Week	2nd Week	3rd Week	4th Week	5 <sup>th</sup> Week
				Definition of a	Cosets, Left and
				group, Subgroups	right cosets, Index
July				and Subgroup	of a sub-group
·				criteria,	Coset
				Generation of	decomposition,

				groups, cyclic groups,	Largrage's theorem and its consequences
August	Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Largrage's theorem and its consequences	Normal subgroups, Quotient groups,	Normal subgroups, Quotient groups,	Homoomorphisms, isomophisms, automorphisms and inner automorphisms of a group.	Homoomorphisms, isomophisms, automorphisms and inner automorphisms of a group.
September	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	Introduction to rings, subrings, integral domains and fields	Introduction to rings, subrings, integral domains and fields	Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.
October	Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral	Euclidean rings, Polynomial rings, Polynomials over the rational field	Euclidean rings, Polynomial rings, Polynomials over the rational field	The Eisenstein's criterion, Polynomial rings over commutative rings	The Eisenstein's criterion, Polynomial rings over commutative rings

	domain.			
November	Unique factorization domain	Unique factorization domain		

Name :- Savita , Sandhya Mangla Sub:- REAL ANALYSIS(BSC III year)

Month	1st Week	2nd Week	3rd Week	4th Week	5 <sup>th</sup> Week
			Riemann integral,	Riemann integral,	The
			Integrabililty of	Integrabililty of	Fundamental
July			continuous and	continuous and	theorem of
			monotonic	monotonic	integral
			functions	functions	calculus.
	The Fundamental	Improper integrals	Improper integrals	Frullani's integral,	Continuity,
	theorem of integral	and their	and their	Integral as a	Differentiability
August	calculus. Mean	convergence,	convergence,	function of a	and
	value theorems of	Comparison tests,	Comparison tests,	parameter	integrability of
	integral calculus.	Abel's and Dirichlet's	Abel's and		an integral of
		tests,	Dirichlet's tests,		a function of a
					parameter.
	Continuity,	Definition and	limit points,	subspace of a	subspace of a
	Differentiability	examples of metric	interior points,	metric space,	metric space,
	and	spaces,	open and	equivalent	equivalent
September	integrability of an	neighborhoods	closed sets,	metrics, Cauchy	metrics,
	integral of a		closure and	sequences,	Cauchy
	function of a		interior, boundary	completeness	sequences,
	parameter.		points		completeness

	Cantor's	Cantor's intersection	Continuous	Continuous	sequential
	intersection	theorem, Baire's	functions, uniform	functions, uniform	compactness,
October	theorem, Baire's	category	continuity,	continuity,	Bolzano-
October	category	theorem, contraction	compactness for	compactness for	Weierstrass
	theorem,	Principle	metric spaces	metric spaces	property, total
	contraction				boundedness,
	Principle				finite
					intersection
					property
	sequential	continuity in relation			REVISION
	compactness,	with compactness,			
	Bolzano-	connectedness,			
	Weierstrass	components,			
November	property, total	continuity in relation			
	boundedness,	with connectedness			
	finite intersection				
	property				

Name: Sandhya Mangla

Sub:- NUMERICAL ANALYSIS (B.Sc III Year)

Month	1st Week	2nd Week	3rd Week	4th Week	5 <sup>th</sup> Week
			Finite Differences	Finding the	Interpolation with equal
			operators.	missing terms and	intervals: Newton's
July				effect of error in a	forward
				difference tabular	
				values,	

August	Newton's backward interpolation formulae.	Interpolation with unequal intervals: Newton's divided	Lagrange's Interpolation formulae, Hermite Formula.	Central Differences: Gauss forward	Gauss's backward interpolation formula
	Torridiae.	difference,	Tiomino i omidia.	interpolation formula	
September	Sterling, Bessel Formula.	Probability distribution of random variables, Binomial distribution, Poisson's distribution	Normal distribution: Mean, Variance and Fitting.	Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections –I & II.	Eigen Value Problems: Power method
October	Jacobi's method, Given's method	House-Holder's method, QR method, Lanczos method	Numerical Integration: Newton-Cote's Quadrature formula	Trapezoidal rule, Simpson's one third rule, Simpson's three- eighth rule	Chebychev formula, Gauss Quadrature formula, Numerical solution of ordinary differential equations
November	Single step methods-Picard's method, Taylor's series method	Euler's method, Runge-Kutta Methods			

Name: POOJA TANWAR, SANDHYA MANGLA

 ${\bf Subject: Introductory\ Mathematics\ (MDC).}$ 

**Semester: First** 

Month/ Week	1 <sup>st</sup>	2 <sup>nd</sup>	3rd	4th	5th

JULY			Numbers	Numbers	Revision of Numbers
AUGUST	HCF of numbers	LCM of numbers	Fractions	Decimals	Simplification
SEPTEMBER	Square Roots	Cube Roots	Surds and Indices	Problem on Numbers	Average
OCTOBER	Percentage	Profit And Loss	Ratio and Proportion, Diwali Break	Diwali Break , Problems on Ages	Partnership, Time and Work
NOVEMBER		Time and Distance, Problems on Train	Alligation (Mixture Problem)	Calendar and Clock	

Name: JYOTIKA DUDEJA, SANDHYA MANGLA Subject: APPLICABLE MATHEMATICS (MDC).

**Semester: THIRD SEM** 

Month/ Week	1 <sup>st</sup>	2 <sup>nd</sup>	3rd	4th	5th
JULY			Theory of Sets: Meaning, elements, types, presentation and equality of Sets,	Theory of Sets: Meaning, elements, types, presentation and equality of Sets,	Union, Intersection, Complement nd Difference of Sets,
AUGUST	Venn Diagram, Cartesian Product of two Sets,	Applications of Set Theory.	Matrices and Determinants: Definition of a Matrix	Types of Matrices, Algebra of Matrices;;	Properties of determinants;
SEPTEMBER	Calculation of values of Determinants upto third order.	Adjoint of a Matrix, elementary row and column operations;.	Finding inverse matrix through adjoint;	Solution of a system of Linear equations having unique Solution and involving not more than three variables	Solution of a system of Linear equations having unique Solution and involving not more than three variables
OCTOBER	Compound Interest: Certain different types of interest rate;	Compound Interest: Certain different types of interest rate;	Compound Interest: Certain different types of interest rate;	Concept of present value and amount of a sum.	Concept of present value and amount of a sum.
NOVEMBER	Annuities: Types of annuities; Present value and amount of an annuity, including the case of continuous compounding.	Annuities: Types of annuities; Present value and amount of an annuity, including the case of continuous compounding.			

Name: POOJA TANWAR

**Subject: Programming in C and Numerical Methods (SEC)** 

Class: B.Sc. Physical Science

**Semester: First** 

Month/Week	1st	2nd	3rd	4th	5 <sup>th</sup>
JULY			Computers:	Data Types,	
			A General	Operators and	
			Introduction,	Expression,	
			Introduction	Decision	
			to C	Control	
				Structures	
AUGUST	Loops,	The C	Puppetting	Structures and	Pointers,
	Functions	Preprocessor	of Strings	Union	Files in C
		, Array			
SEPTEMBER	Solution Of	Bolzano or	Regula Falsi	Secant Method	
	Algebraic and	Bisection	or False		
	Transcendental	Method	Position		
	Equations		Method		
OCTOBER	Newton	Simultaneous	Diwali Break	Gauss - Jordan	
	Raphson	Linear		Method, LU	
	Method	Algebraic		Decomposition	
		Equations,		Method	
		Gauss			
		Elimination			
		Method			
NOVEMBER	Cholesky	Jacobi's	Relaxation		
	Method or	Method	Method		
	Square Root				
	Method				

Name: Sandhya Mangla

**Subject: Operational Research Technique (SEC)** 

Class: B.Sc. Physical Science

**Semester: Third** 

Month / week	Ist	Second	Third	Fourth	Fifth
July			Introduction to	Linear	Graphical Method
			Operations	Programming	of Solving LPP with
			Research: Models,	Problems (LPP):	Illustrations
			Methodology, and	Introduction and	
			Classification	Formulation	
August	Standard Form of	Simplex Method:	Simplex Method:	Simplex Method:	Two-Phase Simplex
	LPP and Canonical	Concepts, Basic	Table Form and	Table Form and	Method
	Form	Feasible Solutions,	Applications	Applications	
		and Algorithm			
September	Big-M Method	Big-M Method	Duality in Linear	Duality in Linear	Transportation
			Programming:	Programming:	Problem –
			Concepts and	Concepts and	Introduction and
			Applications	Applications	Mathematical
					Formulation
October	Transportation	Transportation	Unbalanced	Assignment	Hungarian Method
	Problem – Methods	Problem – MODI	Transportation	Problem –	for Solving
	to Find Initial Basic	Method and	Problems and	Introduction and	Assignment
	Feasible Solution	Degeneracy Cases	Applications	Formulation	Problems
November	Applications of	Comprehensive			
	Assignment	Practice on LPP,			
	Problems in	Transportation, and			
	Business and	Assignment			
	Management	Problems			

**Name: POOJA TANWAR** 

**Subject: Mathematical Foundation of Computer Science.** 

**Semester: First** 

**Class- BCA** 

Month/ Week	1st	2 <sup>nd</sup>	3rd	4th	5th
JULY			Set, Set operation, Properties of Set operations	Subset, Venn Diagrams, Cartesian Product	Relation, Properties of Relations, Types of Relations
AUGUST	Equivalence Relation, closure of Relations	Warshell's Algorithm, Functions	Properties of Functions( Domain, Range)	Composition of functions, Surjective	Injective, Polynomial, Ceiling, Floor and Bijective Functions
SEPTEMBER	Counting and Recurrence Relation	Permutation, Combinations	Binomail Coefficients and Theorem	Recurrence Relations with Examples, the tower of Hanoi problem	Solving Recurrence relation with constant coefficients using characteristic equation root

					method.
OCTOBER	Basic terminologies of graphs, connected and disconnected graphs.	Subgraphs, paths and cycles	Complete graph, digraphs ,weighted graphs	Trees, properties of trees	Types of matrices, determinat of a matrix, symmetric and skew- symmetric matrices
NOVEMBER	Orthogonal matrix,Rank of a matrix, inverse of a matrix	Application of matrices to solve system of linear equation, Cayley – Hamilton Theorem			

Name: MAMTA

**Subject: Basic Mathematics.** 

Semester: First Class- Minor

Month / week	First	Second	Third	Fourth	Fifth
July			Introduction to	Functions and	Homogeneity of
			Course and	Variables:	Functions and
			Overview of	Introduction to	Euler's Theorem
			Calculus Concepts	Differential	
				Calculus	
August	Partial	Differentiation of Implicit	Integration as	Methods of	Definite
	Derivatives up to	Functions; Maxima and	Anti-derivative	Integration:	Integration and
	Second Order and	Minima	Process, Standard	Substitution and	Applications
	Applications		Forms	Partial Fractions	(Areas, Surplus
					Problems
September	Nature of	Matrices: Definition, Types,	Matrix Algebra:	Determinants:	Determinants:
	Commodities	and Operations	Addition,	Properties and	Properties and

	Learning Curve; Leontief Input- Output Model		Subtraction, Multiplication	Calculation up to Third Order	Calculation up to Third Order
October	Adjoint and Inverse of a Matrix; Cramer's Rule	Adjoint and Inverse of a Matrix; Cramer's Rule	System of Linear Equations using Matrices	System of Linear Equations using Matrices	REVISION
NOVEMBER	Revision and Discussion of Previous Papers	Final Review and Preparation for End Term Examination			

NAME: MAMTA

SUBJECT: BUSINESS MATHEMATICS.

SEMESTER: THIRD SEM

**CLASS- MINOR** 

MONTH/ WEEK	FIRST	SECOND	THIRD	FOURTH	FIFTH
JULY			Introduction to	Graphical Method	Graphical Method
			Business	of Solving Linear	of Solving Linear
			Mathematics and	Programming	Programming
			Formulation of LPP	Problems	Problems
AUGUST	Applications of LPP	Simplex Method:	Simplex Method:	Solving LPPs up to	Mixed Constraints
	in Business and	Concept, Algorithm,	Concept, Algorithm,	Three Variables	and Duality
	Economics	and Table Form	and Table Form	using Simplex	Concept in Linear
				Method	Programming
SEPTEMBER	Mixed Constraints	Transportation	Transportation	Transportation	Transportation
	and Duality	Problem –	Problem –	Problem – Initial	Problem – Optimal

	Concept in Linear	Introduction and	Introduction and	Basic Feasible	Solution and
	Programming	Formulation	Formulation	Solution Methods	Degeneracy
OCTOBER	Compound Interest	Compound Interest	Present Value and	Applications of	Annuities –
	<ul> <li>Concept and</li> </ul>	<ul> <li>Concept and</li> </ul>	Amount of a Sum	Compound Interest	Introduction, Types,
	Different Interest	Different Interest	under Simple and	in Business	and Uses
	Rates	Rates	Compound Interest	Situations	
NOVEMBER	Present Value and	Valuation of Simple			Present Value and
	Amount of an	Loans and			Amount of an
	Annuity,	Debentures,			Annuity,
	Continuous	Problems Related to			Continuous
	Compounding	Sinking Funds and			Compounding
		Financial			
		Applications			

Name: Mamta

**Subject: Operational Research (MINOR)** 

**Semester: Third** 

Month / week	Ist	Second	Third	Fourth	Fifth
July			Introduction to	Linear	Graphical Method
			Operations	Programming	of Solving LPP with
			Research: Models,	Problems (LPP):	Illustrations
			Methodology, and	Introduction and	

			Classification	Formulation	
August	Standard Form of	Simplex Method:	Simplex Method:	Simplex Method:	Two-Phase Simplex
	LPP and Canonical	Concepts, Basic	Table Form and	Table Form and	Method
	Form	Feasible Solutions,	Applications	Applications	
		and Algorithm			
September	Big-M Method	Big-M Method	Duality in Linear	Duality in Linear	Transportation
			Programming:	Programming:	Problem –
			Concepts and	Concepts and	Introduction and
			Applications	Applications	Mathematical
					Formulation
October	Transportation	Transportation	Unbalanced	Assignment	Hungarian Method
	Problem – Methods	Problem – MODI	Transportation	Problem –	for Solving
	to Find Initial Basic	Method and	Problems and	Introduction and	Assignment
	Feasible Solution	Degeneracy Cases	Applications	Formulation	Problems
November	Applications of	Comprehensive			
	Assignment	Practice on LPP,			
	Problems in	Transportation, and			
	Business and	Assignment			
	Management	Problems			