Name :- Mrs. Anil Kumari Sem - 6th
A P (Maths)

Paper - Dynamics.

Month	Week	Topic
January	3rd	Velocity and Acce. along radial, transverse
	4th	Velo and Acce. tengential and Normal directio
February	1st	Relative velo. and Acce.
	2nd	S.H.M
	3rd	Elastic strings.
	4th	Mass, Momentum and force.
March	1st and 2nd	Newton's Law of motion, Revision and test
	3rd	Work, power and Energy
	4th	Definitions of Conservative forces and Impulsive forces.
April	1st.	General motion of a rigid body.
	2nd	Central orbits.
	3rd	Kepler's law of motion.
	4th	Motion of a particale in three D
May	1st.	Acceleration in terms of diff. co-ordinate systems.
	2nd	Rivisions, Assignment, test-

Name - Mrs. Anil kumari
A P (Maths)

Sem - 4th

Paper - Special functions and Integral Transforms.

Month	Week	Topic
January	3rd	Series solution of differential equations:
	4th	Power series method, Beta and Gamma functions, Bessel equations and its solution, Bessel functions and their properties.
February	1st	Convergence, Recurrence relations and generating ~~function~~. Orthogonality.
	2nd	Legendre and Hermite diff. equations and their solutions. and properties.
	3rd	Orthogonality of Bessel, Legendre and Hermite's functions.
	4th Week.	Revision and test
March	1st and 2nd	Laplace transformas, Existence theorem, Linearity, shifting Theorems
	3rd	Laplace transforms of derivatives and integrals.
	4th	Convolution theorem Inverse Laplace transforms
April	1st	Solution of DDE using Laplace transform.
	2nd	Fourier transforms: Linearity, shifting, Modulation
	3rd	Convolution theorem, Derivaties.
	4th	Relations between Fourier transform and Laplace, Revision and test
May	1st	Parsevals Identity, Solution of diff. equ. using Fouries transformations.
	2nd	Revision, Assignment and Test.

Anil

Name :- Mrs. Anil Kumari Sem :- 2nd
AP (Maths)
Paper :- Vector Calculus.

months	week	Topic
January	3rd	Scalar and vector product of three vectors.
	4th	Product of four vectors., Reciprocal Vectors. Vector diff.
February	1st	Scalar and Vector valued funct.
	2nd	Directional derivatives, Gradient, Geometrical Interpretation grad ϕ
	3rd	Divergence and curl
	4th	Gradient, dive, and curl of sums, product Laplacian operator
March	1st and 2nd	Orthogonal curvilinear coordinates, conditions.
	3rd	Gradient, Divergence, curl and Laplacian operators in terms of orthogonal curvilinear cordinats
	4th	Problem taking Revision and test,
April	1st	Cylindrical co-ordinates
	2nd	Spherical co-ordinates
	3rd	Vector Integration,
	4th	Line integral, Surface integral, Volumn integ.
May	1st	Theorems of Gauss, Green and stokes.
	2nd	Revision, Assignment, test.