

# COLLEGE: MBP GOVT. P.G. COLLEGE, ASHIANA, LUCKNOW

## ACADEMIC CALENDAR : SESSION- ( 2020-2021 )

**NAME OF TEACHER:** DR. POONAM BAJPAI

**DEPARTMENT:** DEPARTMENT OF MATHEMATICS

**CLASS:** BSC-I YEAR ( II SEMESTER ) (APPLICABLE FROM JANUARY 2021)

S.NO.	CLASS (YEAR, SEMESTER)	PAPER	UNIT	TOPIC NAME	MONTHLY/W EKKLY PLAN	TEACHING PEDAGOGY	LEARNING OUTCOMES	ANY OTHER DETAIL
01	02	03	04	05	06	07	08	09
I	BSC-I YEAR, II SEM	PAPER –I  (MATRICES & DIFFERENTIAL EQUATIONS)	UNIT-I	Types of Matrices, Elementary operations on Matrices, Rank of a Matrix, Echelon form of a Matrix, Normal form of a Matrix, Inverse of a Matrix by elementary operations, System of linear homogeneous and non-homogeneous equations, Theorems on consistency of a system of linear equations.	MIN. 12 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS
			UNIT-II	Eigen values, Eigen vectors and characteristic equation of a matrix, Caley-Hamilton theorem and its use in finding inverse of a matrix, Complex functions and separation into real and imaginary parts, Exponential and Logarithmic functions Inverse trigonometric and hyperbolic functions	MIN 12 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS
			UNIT-III	Formation of differential equations, Geometrical meaning of a differential equation, Equation of first order and first degree, Equation in which the variables are separable, Homogeneous equations, Exact differential equations and equations reducible to the exact	MIN 16 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS

				form, Linear equations.					
			UNIT-IV	First order higher degree equations solvable for x, y, p, Clairaut's equation and singular solutions, orthogonal trajectories, Linear differential equation of order greater than one with constant coefficients, Cauchy-Euler form.	MIN 12 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS	
									<b>FINAL EVALUATION THROUGH INTERNAL ASSESMENT UPLOADED ON LU EXAM PORTAL</b>
<b>II</b>	<b>BSC-I YEAR, II SEM</b>	<b>PAPER-II (GEOMETRY)</b>	UNIT-I	General equation of second degree, System of conics, Tracing of conics, Confocal conics, Polar equation of conics and its properties.	MIN 10 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS	
			UNIT-II	Three-Dimensional Coordinates, Projection and Direction Cosine, Plane (Cartesian and vector form), Straight line in three dimension (Cartesian and vector form).	MIN 14 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS	
			UNIT-III	Sphere, Cone and Cylinder.	MIN 14 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS	
			UNIT-IV	Central conicoids, Paraboloids, Plane section of conicoids, Generating lines, Confocal conicoids, Reduction of second degree equations.	MIN 14 LECTURES	ONLINE &OFFLINE TEACHING METHOD  (NOTES IN FORM OF PDF,AUDIO/ VIDEO,CLASS ROOM TEACHING METHOD)	STUDENTS WILL GET THE UNDERSTANDING OF THE TOPIC DISCUSSED.	EVALUATION THROUGH ASSIGNMENTS AND DISCUSSIONS	
									<b>FINAL EVALUATION THROUGH INTERNAL ASSESMENT UPLOADED ON LU</b>

