# **Lesson Plan (2023-24)**

### 1St Sem

Name of the Assistant/ Associate Professor: - Sangeeta

Class: B.A/ B.SC. 1st

Subject: Calculus

Week	Topics
Sep 1	Introduction to Syllabus and Pattern
Sep 2	Successive differentiation, Leibnitz theorm
Sep 3	Maclaurin and Taylor series expensions
Sep 4	Newtons method, Radius of curvature for pedal curves
Oct 1	Tangential polar equations
Oct2	circle of curvature, chord of curvature
Oct 3	Asymptotes, Intersection of curve and its asymptotes
Oct 4	Test for concavity and convexity
Nov 1	Points of inflexion, multiple points
Nov 2	Cusps, nodes, conjugate points
Nov 3	Reduction formulae, Rectification
Nov 4	Multiple integrals Area and volume by double integral
Dec 1	Cylindrical and spherical coordinates, Volume of solid

### LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

**Academic Session:- 2023-24** 

Semester:- B.Sc. Non Medical / B.A.

**Subject:- MECHANICS** 

**Teacher name:- MS. SANGEETA** 

	LESSON PLAN OF MECHANICS		
February			
Week 3:	Composition and resolution of forces		
Week 4:	Composition and resolution of forces		
March			
Week 1:	Resultant of two parallel forces and their applications		
Week 2:	Moments		
Week 3:	couples		
Week 4:	Analytic conditions of equilibrium of coplanar forces		
April			
Week 1:	Velocity and acceleration along radial, transverse, tangential and normal direction		
Week 2:	Relative velocity and acceleration		
Week 3:	Simple harmonic motion		
Week 4:	elastic string		
May			
Week 1:	Newton's law of motion		
Week 2:	Work and Power		
Week 3:	Energy		

#### LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

**Academic Session:- 2023-24** 

Semester:- B.A. / B.Sc. Non medical

**Subject:- NUMBER THEORY AND TRIGONOMETRY** 

**Teacher name:- MS. SANGEETA** 

	LESSON PLAN OF NUMBER THEORY AND TRIGONOMETRY		
February			
Week 3:	Introduction to Syllabus and Pattern		
Week 4:	Divisibility, Greatest common divisor, least common multiple, primes		
March			
Week 1:	Fundamental theorem of arithmetic , linear congruencies		
Week 2:	Fermat's theorem, Wilson's theorem and its converse		
Week 3:	Complete residue system and reduced residue system modulo m, Euler function, Chinese remainder theorem		
Week 4:	Quadratic residues, Legender symbol, Gauss lemma, Greatest integer function, Divisor function, Sum function		
April:			
Week 1:	De Moivre's theorem, Expansion of trigonomrtric functions		
Week 2:	Direct circular and hyperbolic functions and their properties		
Week 3:	Logarithm of a complex quantity		
Week 4:	Gregory's series		
May Week 1:	Summation of trigonometric series		
Week 2:	Doubt classes		

## **Lesson Plan (2023-24)**

### 3rd Sem

Name of the Assistant/ Associate Professor: - Sangeeta

Class: B.A /B.SC. 2nd

Subject: Numerical methods with Programming in C

Week	Topics
Sep 1	Programmer model of a computer, algorithms, flow chart
Sep 2	Data type, operators and expressions, input/output functions
Sep 3	Decision control structures, logical and conditional statements, Loops, Switch and Case control structure
Sep 4	Strings, character data types, Arithmetic operation on characters
Oct 1	Structure: definition and uses
Oct2	Solution of algebraic and transcendental equations; Bisection method
Oct 3	Regula falsi method, secant method
Oct 4	Fixed point iterative method, Newton Raphson's method
Nov 1	Newton iterative formulae for nth root of a number and order of convergence
Nov 2	Gauss elimination method, Gauss Jordan method
Nov 3	Iterative method and Jacobi method
Nov 4	Gauss seidal method and Relaxation method
Dec 1	Order of convergence and revision