LESSON PLAN

Name of Assistant Professor: Mantesh Rani

Class: B.Com. Ist Sem

Subject: Bussiness Mathematics – I

Lesson Plan: August to 15th Dec. 2022

Week 1 →	Definition of matrix, Type of matrices, Algebra of matrices, properties of determinants, Calculation of values of determinants upto third order.
Week 2 →	Adjoint of a matrix, elementary row and column operations, finding inverse through adjoint.
Week 3 →	finding inverse through elementary row or column operations + test + assignment.
Week 4 →	Solution of a system of linear equations having unique solution + examples
Week 5 →	Solution of a system of linear equations involving not more than three variables.
Week 6 →	Basics of logarithms, properties of logarithms + test.
Week 7 →	Antilogarithm, use of logarithms and Antilogarithms in finding the nth root.
Week 8 →	Certain types of interest rates, concept of present value and amount of a sum.
Week 9 →	Types of annuities, Present value and amount of an annuity + assignment.
Week 10 →	Continuous compounding, Valuation of simple loans and debentures.
Week 11 →	Problem relating to sinking funds + examples of annuity.

Mantesh

Name → Mamtesh Rani
class → B. Com. Ist Sem.
Subject → Bus. Maths - I
Lesson Plan → August to 15th Dec. 2022.

Week 12	→ Arithmetic Progression, Geometric Progression + examples.
Week 13	→ Idea of simple derivative of different functions.
Week 14	→ Rules of differentiation - simple standard forms
Week 15	→ maxima and minima of relating to cost, revenue and profit. + revision.
Examinations	

Mamtesh

LESSON PLAN

Name of Assistant Professor: Ms. Mamtesh Rani

Class: B.A. V Sem

Subject: Mathematics

Lesson Plan: August to 15th Dec. 2022

Week 1 →	Group and Subgp., finite difference operators, Riemann Integral
Week 2 →	Cosets, Improper Integrals and their convergence
Week 3 →	Homomorphism → Interpolation with equal Intervals Integral as a function of parameter
Week 4 →	Automorphism → Interpolation with unequal Intervals + test + assignment
Week 5 →	Permutation groups, Metric Spaces
Week 6 →	Ring and fields, central difference Interpolation formulae
Week 7 →	Ideal Ring, open and closed sets in metric spaces
Week 8 →	Quotient Ring, Probability distributions, Completness in M.S.
Week 9 →	Homomorphism of Rings, completness in M.S. + test exp.
Week 10 →	Numerical differentiation, Continuity in M.S.
Week 11 →	Euclidean Ring, Uniform Continuity in M.S.

Mamtesh

Name → Mantesh Rani
Class → B.A. V Sem
Subject → Mathematics
lesson plan → August to 15th Dec. 2022

Week 12 →	Polynomial Rings, Uniform continuity in M.S. exp
Week 13 →	Eigen value problems, Compactness in M.S.
Week 14 →	Numerical ~~Solutions~~ Integration, Connectedness in M.S
Week 15 →	Numerical solutions of O.D.E. + Revision.
Examinations	

Mantesh

LESSON PLAN

Name of Assistant Professor: Ms. Mamtesh Rani

Class: B.A. IIIrd Sem.

Subject: Mathematics

Lesson Plan: August to 15th December 2022

Week 1 →	formation of partial diff. eqn, Continuous function, The derivative and Mean value thm, Forces Acting at a point.
Week 2 →	First order Linear Partial differential eqn, Inderminate forms, Parallel Forces.
Week 3 →	Moments, Couples, first order Non-linear. partial diff. eqn + test
Week 4 →	Limit and Continuity of functions of two Variables, Analytical conditions of Equilibrium of Coplaner forces
Week 5 →	friction, Linear partial diff eqn of second and higher orders, partial differentiation + assignment
Week 6 →	Centre of gravity + Two variables differentiability P.D.E. with Variable Coefficients, Reducible to eqn with Constant coeff.
Week 7 →	Virtual work, maxima, minima of a function of two variable, + test
Week 8 →	forces in three dimensions, Curves in Space Classification of second order Linear P.D.E.
Week 9 →	wrenches, Circle of Curvature, Canonical form of second order Linear P.D.E. Exp.
Week 10 →	Null lines, Spherical Curvature, + assignment + test
Week 11 →	Null planes, Canonical form of second order linear P.D.E. Exp.

Mamtesh

Name → Mantesh Rani
Class → B.A. IIIrd Sem.
Subject → Mathematics
lesson plan → August to 15th Dec. 2022

Week 12 →	Stable, Unstable and Neutral Equilibrium Monge's Method for P.D.E. of second order.
Week 13 →	Involutes and Evolutes, Characteristic of second order P.D.E..
Week 14 →	Concept of a Surface and Envelopes, Cauchy's problem.
Week 15 →	Method of Separation of Variables :- Wave, Heat and Laplace equations + Revision
Examinations	

Mantesh
(Asst. Prof. math)

LESSON PLAN

Name of Assistant Professor: Mantesh Rani

Class: B.A. Ist Sem

Subject: Mathematics

Lesson Plan: August to 15th Dec. 2022

Week 1	→ Symmetric, Skew symmetric, Hermition, Skew-Hermition matrices, Elementary operations on matrices, General equation of second degree, Tracing of conics, Limit, continuity.
Week 2	→ Rank of a matrix, Inverse of a matrix, Tangent at any point to the conic, Basic properties of limit.
Week 3	→ Linear dependence and independence, Row rank and column rank, pole, director circle + test
Week 4	→ classification of discontinuities, differentiability, eigen values, eigen vectors, System of conics.
Week 5	→ Characteristic equation of matrix, Confocal conics, general th^m's on differentiable functions.
Week 6	→ Applications of matrices to system of Linear equations, Polar equation of a Conic + assignment
Week 7	→ Asymptotes, orthogonal and unitary matrices Sphere. + test
Week 8	→ Bilinear and Quadratic forms, Cone Curvature, Singular points.
Week 9	→ Relation between Roots and coefficients of an eq^n, Cylinder, Curve tracing + assignment.
Week 10	→ Transformation of equations, The Conicoid,
Week 11	→ Solution of Cubic and Biquadratic eqns Plane sections of Conicoids.

Mantesh

(Asst. Prof. Math)

Name → Mantesh Rani
Class → B.A. Ist Sem
Subject → Mathematics
Lesson plan → August to 15th Dec. 2022

Week 12 →	Descarte's Rule of Signs, Generating lines.
Week 13 →	Reduction formulae, Confocal conicoids.
Week 14 →	Rectification, Quadrature + test, Volumes and Surfaces of Solids of Revolution
Week 15 →	Reduction of Second Degree Equations + Revision.
Examinations	

Mantesh