Lesson Plan 2023-24

Class: B. A. / B. Sc. VIth semester

Name of Teacher : Dr. Sandeep Sharma Name of Paper: Dynamics

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| 01.02.2024- 03.02.2024 | Velocity and acceleration along radial, transverse, tangential and normal direction. |
| 04.02.2024- 10.02.2024 | Relative velocity and acceleration. |
| 12.02.2024- 17.02.2024 | Simple Harmonic Motion. Elastic Strings. |
| 19.02.2024- 24.02.2024 | Mass, Momentum and Force. **Unit Test.** |
| 26.02.2024- 02.03.2024 | Newton’s Law of Motion. **Assignment II.** |
| 04.03.2024- 09.03.2024 | Work, Power and Energy. |
| 11.03.2024- 16.03.2024 | Definitions of Conservative forces and impulsive forces. |
| 18.03.2024- 22.03.2024 | Motion on smooth and rough plane curves |
| 28.03.2024- 06.04.2024 | Projectile motion of a particle in a plane. |
| 08.04.2024- 13.04.2024 | Projectile motion of a particle in a plane. |
| 15.04.2024- 20.04.2024 | Vector angular velocity. |
| 22.04.2024- 27.04.2024 | General motion of a rigid body: Central Orbit, Kepler’s Law of Motion |
| 29.04.2024- 04.05.2024 | Motion of a particle in three dimensions. |
| 06.05.2024- 11.05.2024 | Acc. in terms of different co-ordinate system. **Assignment II.** |
| 13.05.2024- 15.05.2024 | Revision |

Lesson Plan 2023-24

Class: B. Com. IInd semester

Name of Teacher : Dr. Sandeep Sharma Name of Paper: Business Mathematics II

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| 01.02.2024- 03.02.2024 | Differentiation, derivative of simple functions. |
| 04.02.2024- 10.02.2024 | Applications of Derivative, Maxima and Minima. |
| 12.02.2024- 17.02.2024 | Profit function and other functions related to business and Commerce, **Assignment II.** |
| 19.02.2024- 24.02.2024 | Integration: Definite and Indefinite Functions**, Unit Test.** |
| 26.02.2024- 02.03.2024 | Basic rules if Integration. |
| 04.03.2024- 09.03.2024 | Applications of Integration in Commercial Problems. |
| 11.03.2024- 16.03.2024 | Applications of Integration in Commercial Problems. |
| 18.03.2024- 22.03.2024 | Binomial Theorem |
| 28.03.2024- 06.04.2024 | Permutation and Combinations. |
| 08.04.2024- 13.04.2024 | Permutation and Combinations. |
| 15.04.2024- 20.04.2024 | Linear Programming. |
| 22.04.2024- 27.04.2024 | Formulation of LPP and their solution by graphical and simplex method. |
| 29.04.2024- 04.05.2024 | Formulation of LPP and their solution by graphical and simplex method. |
| 06.05.2024- 11.05.2024 | Application of LPP, **Assignment II.** |
| 13.05.2024- 15.05.2024 | Revision |

Lesson Plan 2023-24

Class: B. A. / B. Sc. Ist semester

Name of Teacher : Dr. Sandeep Sharma Name of Paper: Calculus

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| 24.07.2023- 31.07.2023 | ε-δ definition of limit band continuity of a real valued function |
| 01.08.2023-05.08.2023 | Basic properties of limits, types of discontinuities, Applications of L’Hospital Rule. |
| 07.08.2023-12.08.2023 | Successive differentiation, Leibinitz theorem. |
| 14.08.2023-19.08.2023 | Taylor’s and Maclarurin’s theorem with different forms of remainders. |
| 21.08.2023-02.09.2023 | Taylor’s and Maclarurin’s theorem with different forms of remainders. |
| 11.09.2023- 16.09.2023 | Asymptotes: Horizontal, vertical and oblique asymptotes. |
| 18.09.2023- 23.09.2023 | Asymptotes of polar curves, intersection of a curve and its asymptotes. |
| 25.09.2023- 30.09.2023 | Curvature and radius of curvature of a curve. |
| 02.10.2023- 07.10.2023 | Newton’s method, centre of curvature and circle of curvature. |
| 09.10.2023- 14.10.2023 | Multiple points, Node, Cusp, Conjugate points. **Assignment- I** |
| 15.10.2023- 21.10.2023 | Tests for concavity and convexity. |
| 23.10.2023- 28.10.2023 | Points of inflexion, Tracing of curves. |
| 30.10.2023- 04.11.2023 | Reduction formulae. **Unit Test.** |
| 06.11.2023- 09.11.2023 | Rectification, intrinsic equation of curve. |
| 17.11.2023- 25.11.2023 | Quadrature, Area bounded by closed curve. |
| 28.11.2023- 02.12.2023 | Area bounded by closed curve. **Assignment- II** |
| 04.12.2023- 09.12.2023 | Volumes and surfaces of solids of revolution. |
| 11.12.2023- 14.12.2023 | Rivision |

Lesson Plan 2023-24

Class: B. Com. Ist semester

Name of Teacher : Dr. Sandeep Sharma Name of Paper: Business Mathematics II

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| 24.07.2023- 31.07.2023 | Set Theory: Representation of sets, equivalent sets. |
| 01.08.2023-05.08.2023 | Power sets, complement of sets, Venn Diagram. |
| 07.08.2023-12.08.2023 | Union and Intersection of sets. |
| 14.08.2023-19.08.2023 | De-Morgan’s Law. |
| 21.08.2023-02.09.2023 | Logical statements and truth tables. |
| 11.09.2023- 16.09.2023 | Logarithms: Laws of operations. |
| 18.09.2023- 23.09.2023 | Log Table. |
| 25.09.2023- 30.09.2023 | Arithmetic and Geometric progressions. |
| 02.10.2023- 07.10.2023 | Arithmetic and Geometric progressions. |
| 09.10.2023- 14.10.2023 | Matrices and Determinant: Definition, order, equality and types of matrix. **Assignment- I** |
| 15.10.2023- 21.10.2023 | Operations like addition, subtraction, multiplication in matrices. |
| 23.10.2023- 28.10.2023 | Determinant of square matrix and its properties. |
| 30.10.2023- 04.11.2023 | Adjoint and inverse of matrix. Solutions of system of equations using matrices. **Unit Test.** |
| 06.11.2023- 09.11.2023 | Compound Interest and Annuities: Different types of interest rates. |
| 17.11.2023- 25.11.2023 | Types of annuities, present values and amount of annuities. |
| 28.11.2023- 02.12.2023 | Valuations of simple loans and debentures. **Assignment- II** |
| 04.12.2023- 09.12.2023 | Problems related to sinking funds. |
| 11.12.2023- 14.12.2023 | Revision |