**LESSON PLAN FOR THE SESSION 2023-24**

**Name of Faculty**: Dr Ashish **Paper:** Calculus

**Class and Section:** B.Sc. 1st Sem (Sect A & B) **Subject:** Mathematics

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| **Week** | **Date** | **Topic** |
| 1 | 17-08-2023 | Preliminaries on Functions |
| 18-08-2023 | Introduction to Limit of a Function  |
| 19-08-2023 | Problems  |
| 2 | 21-08-2023 | Introduction to Limit of a Function |
| 22-08-2023 | Algebra of Limit of Functions  |
| 23-08-2023 | Algebra of Limit of Functions |
| 24-08-2023 | Introduction to Continuous Function  |
| 25-08-2023 | Introduction to Continuous Function  |
| 26-08-2023 | Class Test |
| 3 | 28-08-2023 | Algebra of Continuous Functions |
| 29-08-2023 | Derivability at Interior Points |
| 30-08-2023 | **Raksha Bandhan** |
| 31-08-2023 | Standard Results on nth Derivatives |
| 01-09-2023 | Standard Results on nth Derivatives |
| 02-09-2023 | Problems |
| 4 | 04-09-2023 | Some Typical results on nth Derivatives  |
| 05-09-2023 | Leibnitz’s Theorem  |
| 06-09-2023 | **Janmashtami** |
| 07-09-2023 | Calculation of nth Derivative at x = 0 |
| 08-09-2023 | Calculation of nth Derivative at x = 0 |
| 09-09-2023 | Problem |
| 5 | 11-09-2023 | Introduction to Mean Value theorems |
| 12-09-2023 | Taylors Theorem  |
| 13-09-2023 | Taylors Theorem |
| 14-09-2023 | Maclaurin’s Theorem  |
| 15-09-2023 | Maclaurin’s Theorem |
| 16-09-2023 | Problems on Taylors and Maclaurin Theorem |
| 6 | 18-09-2023 | Infinite Series |
| 19-09-2023 | Taylors Theorem for Infinite Series  |
| 20-09-2023 | Maclaurin’s Theorem for Infinite Series |
| 21-09-2023 | Problems |
| 22-09-2023 | Applications of Taylors Theorem |
| 23-09-2023 | **Shaheedi Diwas** |
| 7 | 25-09-2023 | Asymptotes |
| 26-09-2023 | Finite and Infinite Branches of a Curve |
| 27-09-2023 | Horizontal and Vertical Asymptotes  |
| 28-09-2023 | Problems Horizontal and Vertical Asymptotes  |
| 29-09-2023 | Problems Horizontal and Vertical Asymptotes |
| 30-09-2023 | Obliques Asymptotes for General Algebraic curves |
| 8 | 02-10-2023 | **Mahatma Gandhi Jayanti** |
| 03-10-2023 | Asymptotes of Polar Curves  |
| 04-10-2023 | Problems on Asymptotes of Polar Curves  |
| 05-10-2023 | Curvature  |
| 06-10-2023 | Intrinsic Equation of a Curve |
| 07-10-2023 | Curvature of a Circle  |
| 9 | 09-10-2023 | Radius of Curvature  |
| 10-10-2023 | Problems  |
| 11-10-2023 | Radius of Curvature for Polar Equations  |
| 12-10-2023 | Radius of Curvature for Polar Equations  |
| 13-10-2023 | Test |
| 14-10-2023 | Radius of Curvature at Origin |
| 10 | 16-10-2023 | Centre of Curvature  |
| 17-10-2023 | Singular Points |
| 18-10-2023 | Species of Cusps |
| 19-10-2023 | Concavity and Convexity |
| 20-10-2023 | Continue  |
| 21-10-2023 | Continue |
| 11 | 23-10-2023 | Curve Tracing |
| 24-10-2023 | **Dusshera** |
| 25-10-2023 | Parametric Equations |
| 26-10-2023 | Tracing of Polar Curves |
| 27-10-2023 | Tracing of Polar Curves |
| 28-10-2023 | **Maharshi Valmiki Jayanti** |
| 12 | 30-10-2023 | Reduction formulae |
| 31-10-2023 | To be Continued |
| 01-10-2023 | To be Continued |
| 02-10-2023 | To be Continued |
| 03-10-2023 | To be Continued |
| 04-10-2023 | Test |
| 13 | 06-11-2023 | Rectification  |
| 07-11-2023 | Fundamental Theorems on Rectification  |
| 08-11-2023 | Length of the Parametric Curves |
| 09-11-2023 | Length of the Polar Curves |
| 10-11-2023 | **Diwali Vacations** |
| 11-11-2023 | **Diwali Vacations** |
| 14 | 13-11-2023 | **Diwali Vacations** |
| 14-11-2023 | **Diwali Vacations** |
| 15-11-2023 | **Diwali Vacations** |
| 16-11-2023 | **Diwali Vacations** |
| 17-11-2023 | Intrinsic Equation of a Curve  |
| 18-11-2023 | Problems  |
| 15 | 20-11-2023 | Quadrature  |
| 21-11-2023 | Area formula for Parametric Curve  |
| 22-11-2023 | Area formula for Polar Curve  |
| 23-11-2023 | Volume and Surfaces of Solid Revolution  |
| 24-11-2023 | Test |
| 25-11-2023 | Problems |
| 16 | 27-11-2023 | Problems |
| 28-11-2023 | Revision |
| 29-11-2023 | Revision |
| 30-11-2023 | Revision |

Signature of Faculty