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

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

**Class and Section:** B.Sc. 3rd Sem (Sect A & B) **Subject:** Mathematics

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| **Week** | **Date** | **Topic** |
| 1 | 17-08-2023 | Preliminaries: Sequence, Types of Sequence |
| 18-08-2023 | Preliminaries: Sequence, Types of Sequence |
| 19-08-2023 | Continuous Function |
| 2 | 21-08-2023 | Continuous Function |
| 22-08-2023 | Intermediate Value Theorems |
| 23-08-2023 | Problems |
| 24-08-2023 | Intermediate Value Theorems |
| 25-08-2023 | Problems |
| 26-08-2023 | Uniform Continuity  |
| 3 | 28-08-2023 | Uniform Continuity |
| 29-08-2023 | Uniform Continuity |
| 30-08-2023 | **Raksha Bandhan** |
| 31-08-2023 | The Derivative Darboux’s Theorem |
| 01-09-2023 | The Derivative Darboux’s Theorem |
| 02-09-2023 | Rolle’s Theorem |
| 4 | 04-09-2023 | Rolle’s Theorem |
| 05-09-2023 | Problems |
| 06-09-2023 | **Janmashtami** |
| 07-09-2023 | Lagrange’s Mean Value Theorem |
| 08-09-2023 | Problems |
| 09-09-2023 | Cauchy’s Mean Value Theorem |
| 5 | 11-09-2023 | Cauchy’s Mean Value Theorem |
| 12-09-2023 | Problems |
| 13-09-2023 | Taylor’s Theorem |
| 14-09-2023 | Taylor’s Theorem |
| 15-09-2023 | Problem’s on Derivative and Mean Value theorems |
| 16-09-2023 | Indeterminate Forms  |
| 6 | 18-09-2023 | Indeterminate Forms  |
| 19-09-2023 | Problems |
| 20-09-2023 | Test |
| 21-09-2023 | L’Hospital Rule Form-2 |
| 22-09-2023 | L’Hospital Rule Form-2 |
| 23-09-2023 | **Saheedi Diwas** |
| 7 | 25-09-2023 | L’Hospital Rule Form-3 |
| 26-09-2023 | L’Hospital Rule Form-3 |
| 27-09-2023 | Problems on Indeterminate Forms  |
| 28-09-2023 | Function’s of Two Variables |
| 29-09-2023 | Function’s of Two Variables |
| 30-09-2023 | Function’s of Two Variables |
| 8 | 02-10-2023 | **Mahatma Gandhi Jyanti** |
| 03-10-2023 | Limit of Functions of Two Variables |
| 04-10-2023 | Problems |
| 05-10-2023 | Continuity of a Function of Two Variables |
| 06-10-2023 | Continuity of a Function of Two Variables |
| 07-10-2023 | Problems  |
| 9 | 09-10-2023 | Test |
| 10-10-2023 | Revision |
| 11-10-2023 | Partial Differentiation  |
| 12-10-2023 | Homogenous Functions |
| 13-10-2023 | Total Increment and Total Differential |
| 14-10-2023 | Implicit Function |
| 10 | 16-10-2023 | Taylors Theorem for functions of Two variables |
| 17-10-2023 | Problems |
| 18-10-2023 | Differentiability of functions of two variables  |
| 19-10-2023 | Differentiability of functions of two variables  |
| 20-10-2023 | Young’s Theorem |
| 21-10-2023 | Schwartz Theorem |
| 11 | 23-10-2023 | Problems |
| 24-10-2023 | **Dusshera** |
| 25-10-2023 | Implicit Function Theorem |
| 26-10-2023 | Problems |
| 27-10-2023 | Maximum of Functions of Two variables |
| 28-10-2023 | **Maharshi Valmiki Jayanti** |
| 12 | 30-10-2023 | Problems |
| 31-10-2023 | Lagrange’s Method |
| 01-11-2023 | **Haryana Day** |
| 02-11-2023 | Lagrange’s Method |
| 03-11-2023 | Test |
| 04-11-2023 | Curves in Space |
| 13 | 06-11-2023 | Tangent to curve |
| 07-11-2023 | Equations of a Tangent Line in Space Curve |
| 08-11-2023 | Osculating Plane, Analytic Function |
| 09-11-2023 | Equation of a Tangent Plane |
| 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 | Involutes |
| 18-11-2023 | Problems |
| 15 | 20-11-2023 | Evolutes |
| 21-11-2023 | Bertrand Curve |
| 22-11-2023 | Concept of a Surface |
| 23-11-2023 | Tangent Plane |
| 24-11-2023 | Normal Line at a Point |
| 25-11-2023 | Test |
| 16 | 27-11-2023 | **Guru Nanak Dev Jayanti** |
| 28-11-2023 | Problems |
| 29-11-2023 | Revision |
| 30-11-2023 | Revision |

Signature of Faculty