

Lesson Plan

Name of the Faculty: Neeti Jain (Theory)

Disciplines: Elect + Elex

Semester: 2nd

Subject: Mathematics

Lesson Plan Duration: 15 Weeks (From January 2018 to April 2018)

Lecture Load Per week: Theory (05)

| WEEK | THEORY | |
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| | Lecture Day | Topic |
| 1st | 1st | Discussion of Previous Paper |
| | 2nd | Introduction of Syllabus |
| | 3rd | Revision of General Rules of Algebra |
| | 4th | Definition of Function |
| | 5th | Types of Function |
| 2nd | 1st | Concept of Limits |
| | 2nd | Problems related to four standard limits |
| | 3rd | Definition of Differentiation |
| | 4th | Basic Formulae |
| | 5th | Differentiation of x^n , $\sin x$, $\cos x$ by 1st Principle |
| 3rd | 1st | Differentiation of e^x by 1st principle |
| | 2nd | Problems solving Class |
| | 3rd | Practice and Revision |
| | 4th | Differentiation of sum, product and quotient of Functions |
| | 5th | Examples based on the above Topic |
| 4th | 1st | Examples based on the above Topic |
| | 2nd | Class Test |
| | 3rd | Examples based on the above Topic |
| | 4th | Differentiation of Trigonometry Functions |
| | 5th | Differentiation of Inverse Trigonometric Functions |
| 5th | 1st | Examples based on the above Topic |
| | 2nd | Differentiation of Log Functions and Examples |
| | 3rd | Successive Differentiation |
| | 4th | Application of Differentiation, Rate Measures |
| | 5th | Maxima and Minima |
| 6th | 1st | Problem Solving Class |
| | 2nd | Test and Assignment |
| | 3rd | Discussion with the class about the sessional performance |
| | 4th | Revision of Differentiation Formulae |
| | 5th | Definition of Integration with Simple Examples |
| 7th | 1st | Simple Standard Integrals and Related Problems |
| | 2nd | Simple Standard Integrals and Related Problems |
| | 3rd | Evaluation of Definite Integrals |
| | 4th | Evaluation of Definite Integrals |
| | 5th | Evaluation of $\int_0^{\pi/2} \sin^n x \cdot dx$, $\int_0^{\pi/2} \cos^n x \cdot dx$, $\int_0^{\pi/2} \sin^m x \cos^n x \cdot dx$ |

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| 8th | 1st | Problem Solving Class |
| | 2nd | Related Problems |
| | 3rd | Practice Questions |
| | 4th | Application of Integration |
| | 5th | Evaluation of Area Under Curve |
| 9th | 1st | Related Problems |
| | 2nd | Practice Questions |
| | 3rd | Numerical Integration by Trapezoidal Rule |
| | 4th | Related Problems |
| | 5th | Simpson Rule |
| 10th | 1st | Related Problems |
| | 2nd | Related Problems |
| | 3rd | Class Test |
| | 4th | Problem Solving Class |
| | 5th | Test and Assignment |
| 11th | 1st | Discussion with the class about the sessional performance |
| | 2nd | Definition of Differential Equation |
| | 3rd | Definition of Order and Degree |
| | 4th | Related Problems |
| | 5th | Linear and Non-linear Equation |
| 12th | 1st | Revision |
| | 2nd | Definition of Statistics |
| | 3rd | Mean and Related Problems |
| | 4th | Median and Related Problems |
| | 5th | Mode and Related Problems |
| 13th | 1st | Revision |
| | 2nd | Revision |
| | 3rd | Measures of Dispersion |
| | 4th | Mean Deviation and Related Problems |
| | 5th | Median Deviation and Related Problems |
| 14th | 1st | Standard Deviation and Related Problems |
| | 2nd | Co-efficient of Rank correlation |
| | 3rd | Related Problems |
| | 4th | Problem Solving Class |
| | 5th | Test and Assignment |
| 15th | 1st | Discussion with the class about the sessional performance |
| | 2nd | Revision |
| | 3rd | Problem Solving Class |
| | 4th | Problem Solving Class |
| | 5th | Problem Solving Class |