**Syllabus Details(2015-16)**

**Class: - XII Subject: Mathematics Teacher Name: - Mr. Sumit**

**Book Name: - NCERT Ref. Book- RD Sharma**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.****No.** | **Month** | **No of working days** | **Unit/ chapter** | **Weightage of marks & Type of questions** | **Remarks** |
|  | **April** | **22** |  |  |  |
| **1 week** |  | **(CH-3) Matrices :-** **Matrix and its types transpose of matrix, and various operations on the matrices elementary ron(or columns) operations to calculate the inverse of matrix and basic results of matrix** |  | **Easy and scoring area** |
| **2 week** |  | **(CH-4) Determinants:- Determinant solving methods, properties of determinants adjaint, mirror, co-factors of matrix inverse of matrix applications**  |  | **Easy and scoring area** |
| **3 week** |  | **Of the determinant. Solutions of non homogeneous linear equations. Matrix method conrirtancy of the matrix**  |  |  |
| **4 week** |  | **(CH-2) Inverse Trigonometric Functions:-** **Domain and rages of inverse trigonometric functions, some standard results of ITF**  |  | **Easy and scoring area** |
| **S.****No.** | **Month** | **No of working days** | **Unit/ chapter** | **Weightage of marks & Type of questions** | **Remarks** |
|  | **May** | **25** | **ITF (Cont)** |  |  |
| **1 week** |  | **ITF by method of substitution and conversion of area ITF to another** |  | **Difficult section** |
| **2 week** |  | **(CH-5) Continuity :- Basic result of continuity and problems based on the breaking point mel existence of continuity**  |  |  |
| **3 week** |  | **Differentiability:- existence of diff. of various functions** **1. method of derivatives** **2. Chain rule****3. Logarithmic differentiation**  |  | **Easy and scoring**  |
| **4 week** |  | **4. Paramitry functions****5. Rohhe’s throm****6. mean value theron****(CH-1) Relations and fucnation:-** |  |  |
|  | **July** | **25** |  |  |  |
| **1 week** |  | **(CH-6) Applications of derivatives:-****1. Rate of change of quantities****2. Increasing and decreasing**  |  | **Difficult section** |
| **2 week** |  | **3. Tongants and normals****4. Approximations using differential** **5. Marina and minima** |  |  |
| **3 week** |  | **1. By double derivative test****2. By single derivative test** |  |  |
| **4 week** |  | **(CH-7) Integrals:- Basic rules****1. Method of substitution****2. Method of partial fraction****3. Integration by parts** |  | **Difficult section** |
| **S.****No.** | **Month** | **No of working days** | **Unit/ chapter** | **Weightage of marks & Type of questions** | **Remarks** |
|  | **August** | **23** |  |  |  |
| **1 week** |  | **Trigonometric integration some special forms of integrations various miscellaneous forms of integrals**  |  | **Difficult area** |
| **2 week** |  | **Definite integrals:-** **1. Integration by limited as a sum** |  |  |
| **3 week** |  | **2. Fundamental team of definite integral calculus definite integrals by substitution and by changing of limit** |  |  |
| **4 week** |  | **Properties of definite interest and**  |  |  |
|  | **Sept.** | **19** |  |  |  |
| **1 week** |  | **(CH-8) Applications of integrals****Area index simple and double or multiple curers like**  |  | **Difficult area** |
| **2 week** |  | **Parabola, lines, circle, euipre etc** |  |  |
| **3 week** |  | **(CH-9) Differential equations:-****1. Order and degree****2. DE of implicit and explicit function****3. Elimination of arleitary constant**  |  | **Easy and scoring area** |
| **4 week** |  | **4. method of variable separation****5. Homogeneous DE****6. Linear DE** |  |  |
| **S.****No.** | **Month** | **No of working days** | **Unit/ chapter** | **Weightage of marks & Type of questions** | **Remarks** |
|  | **October** | **24** |  |  |  |
| **1 week** |  | **(CH-10) Victors:-** **Various types of rectors****1. Dot product****2. Crass Product****3. Scalar triple product** |  | **Easy and scoring suction**  |
| **2 week** |  | **(CH-11)****3D Geometry:-****1. 3D lines: various froms** |  | **Difficult area** |
| **3 week** |  | **2. 3D plane: Various froms** |  |  |
| **4 week** |  | **(CH-12) Linear programming****Graphical method****1. Diet frodeum****2. Manufacturing problems****3. Transportation problems**  |  | **Scoring area** |
|  | **November** | **20** |  |  |  |
| **1 week** |  | **Probability:-** **1. Conditioner Probability** **2. Independent events****3. Bayl’s team** |  | **Difficult suction**  |
| **2 week** |  | **4. Birormil distribution****5. Probability dist.****Mean, various and standard diviation** |  |  |
| **3 week** |  |  |  |  |
| **4 week** |  |  |  |  |

**Remarks: All above mentioned topics are interrelated and need attention and regularity in class. And dourtine practice is required on Cancun topic**