**Curriculum Plan: B. Sc. (Hons) Mathematics (Semester VI)- ADVANCED GROUP THEORY. (2024-25)-EVEN SEM**

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| **DR. ABHISHEK KR. SINGH**Assistant ProfessorDepartment of MathematicsKalindi CollegeUniversity of DelhiDelhi- 110008Mobile: +91-8375834510**E- mail**: abhishek@kalindi.du.ac.in | C:\Users\Abhishek\Pictures\2014-05-28 002\photo.jpg | **Marks Distribution**  | **Theory** -90  |
| **Internal Assessment-30** |
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| **Classes Assigned** | **Lectures: 3 per week** |
|  | **References** | **1. JOSEPH A. GALLIAN (CONTEMPORARY ABSTRACT ALGEBRA) 4TH ED.** **2. DUMMIT AND FOOTE (ABSTRACT ALGEBRA) 8TH ED.** |
|  | **Week** | **Topics** |
|  | **1st week** | GROUP ACTIONS AND PERMUTATION REPRESENTATION. Continued. |
| **2nd week** | GROUP ACTIONS AND PERMUTATION REPRENTATION. |
| **3rd week** | STABILIZERS AND KERNELS OF GROUP ACTIONS. Continued. |
| **4th week** | STABILIZERS AND KERNELS OF GROUP ACTIONS. |
| **5th week** | GROUP ACTING ON THEMSELVES BY LEFT MULTIPLICATIONS AND CONSEQUENCES. Continued. |
| **6th week** | GROUP ACTING ON THEMSELVES BY LEFT MULTIPLICATIONS AND CONSEQUENCES. |
| **7th week** | CONJUGACY IN Sn. |
| **8th week** | SYLOW THEOREMS |
| **9th week** | FINITE SIMPLE GROUPS |
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|  | **10th week**. | NONSIMPLICITY TESTS |
| **11th week** | SOLVABLE GROUPS |
|  | **12th week** | COMPOSITION SERIES |
| **13th week** | NILPOTENT GROUPS |
| **14th week** | JORDAN-HOLDER THEOREM |
| **15th week** | REVISION. |
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