**Lesson Plan**

**Session: 2021-22**

**Name of Teacher : Sandeep Kumar**

**Subject: Real and Complex Analysis**

**Class:** **B.Sc. 6th semester**

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| **Sr. No.** | **Week** | **Dates** | **Topics to be covered** |
| 1 | 1 | March 21-26 | Jacobians,Beta and Gamma Functions |
| 2 | 2 | March 28-April 02 | Double and Triple integrals |
| 3 | 3 | April 04-09 | Dirichilet's integrals |
| 4 | 4 | April 11-16 | Change of order of integration in double integrals |
| 5 | 5 | April 18-23 | Fourier's series and properties of Fourier Coefficient |
| 6 | 6 | April 25-30 | Dirichilet's conditions, parseval's identity for Fourier series |
| 7 | 7 | May 02-07 | Fourier's series for even and odd functions |
| 8 | 8 | May 09-14 | Half range series and change of intervals |
| 9 | 9 | May 16-21 | Extended complex plane and stereographic projection of complex numbers |
| 10 | 10 | May 23-28 | Continuity and differentiabily of complex functions |
| 11 | 11 | May 30-June 04 | Analytic function and Cauchy Riemann equations |
| 12 | 12 | June 06-11 | Harmonic functions |
| 13 | 13 | June 13-18 | Translation, Rotation,Magnification and Inversion mappings |
| 14 | 14 | June 20-25 | Conformal Mapping and Mobius transformation |
| 15 | 15 | June 27-July 02 | Fixed points,Cross ratio,inverse point |
| 16 | 16 | July 04-09 | Critical Mappings |
|  |  |  | Examinations |