College, Mehrauli, Haryana, 123029
Name of Assistant professor : Dr. Vijaya Rai
Department of Mathematics.
class and semester : BSc 3rd year (6th sem.)

Session : 2021 - 22

Subject : Real and complex Analysis :→
lesson plan (21, March to 15 June 2022)
Week 1. (21 to 26 March) : Jacobians. Double and triple integral. Dirchlet's integral.
Week 2. (28 to 31 March) : Chain of Rule, Beta and Gamma function
Week 3. (1 to 2 April) : Fourier series, Fourier expension, Property of Fourier expension. Dirchelet's Condition Fourier series for even and odd function.
Week 4. (4 to 9 April) : Extended complex plane. projectile of complex number.
Week 5. (11 to 16 April) ; Half Range Series, Properties of Fourier co-efficient.
Week 6. (18 to 23 April) : Analytic function, Reimann integral and its application
Week 7. (25 April to 30 April) : Magnification, Rotation, examples of magnification and

Week 8. (2 May to 7 May) : - Tes of chapter 1 and 2. and presentation of the chapter 1 and 2.

Week 9. (9 to 14 May) : - Translation, Rotatio and examples of Translation and Rotation.

Week 10 (16 to 21 May) : - Mapping by an elementary function and its examples.

Week 11 (23 to 28 May) : - Mobius Tranformation and its examples.

Week 12 (30 to 31 May) : - Conformal mapping and its application cross ration

Week 13 (1 to 4 June) : - Fixed point inverse point and examples.

Week 14 (6 to 11 June) : - Revision of chapter 2 and 3. and presentation of the chapter 2 and 3.

Week 15 (13 to onwards) : - Test of the chapter and presentation.

Govt. College, Mahendergarh, Haryana, 123029
Name of Assistant professor: Dr Vijaya Bar
Department of Mathematics.
Class and Semester: B.Sc 2nd year (4th Sem).
Session: 2021-22

Subject: Sequence and Series
lesson plan: (21, March to 15 June 2022)
Week 1. (21 to 26 March):
Topology of Real numbers, Boundness of the Set of R.
L.UB, Gr.L.B.

week 2. (28 to 31 March): sequences, Real Seq^n and convergence Bounded and Monotonic Seq^n. cauch Seq^n, Cauchy general principle.

week 3. (1 to 2 April): Infinite series, convergence and Divergence of Infinite series, Comparision Test, Cauchy general principle.

Week 4 (4 to 9 April): Infinite Series (Continued)

Week 5 (11 to 16 April): Alternating series, Examples of Alternating series.

Week 6. (18 to 23 April): Arbitrary series and its Examples.

Week 7. (25 to 30 April): Revision chapter 1 & 2.

Week 8. (2 May to 7 May): Revision chapter 3 & 4.

week 9. (9 to 14 May): (Revision Chapter 5 & 6)

week 10. (16 to 21 May): limit Point, Interior point, closure point.

Week 12 (30 to 31 May) : → Re-arrangement of terms in a series, Dirichlet's thm, Riemann's Re-arrangement theorem.)

Week 13 (1 to 4 June): Abel's lemma, Abel's test, Dirichlet's test, Insertion and removal of parentheses

Week 14. (6 to 11 June) : Leibnitz's test, absolute and conditional convergence, Arbitrary Series.

Week 15 (13 to onwards) : Test of the chapter and presentation.