



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Dr. Geeta Tripathi
 Qualification/ Department: Assistant Professor/Mathematics

CLASS: B.Sc. Maths (Hons,)	SEMESTER: 4 th Sem	SECTION:
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SUBJECT: Sequence and Series

Week		
1	7-1-2025	Introduction to the subject
	8-1-2025	Boundedness of the set of real numbers
	9-1-2025	Definition of Least upper bound, greatest lower bound of a set
	10-1-2025	Definition of neighborhoods, interior points, isolated points, limit points
	11-1-2025	Definition of open sets, closed set, interior of a set, closure of a set in real numbers and their properties
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	Questions to be discussed on topics done till now
	14-1-2025	Doubt Class
	15-1-2025	Bolzano-Weiestrass theorem
	16-1-2025	Open covers, Compact sets
	17-1-2025	Heine-Borel Theorem
	18-1-2025	Revision and Doubt class of these two theorems
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	Test of Unit-1
	21-1-2025	Definition of Sequence: Real Sequences and their convergence

	22-1-2025	Theorem on limits of sequence
	23-1-2025	Bounded and monotonic sequences
	24-1-2025	Definition of Cauchy's sequence, Cauchy general principle of convergence
	25-1-2025	Definition of Subsequences, Subsequential limits
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	Examples to be discussed on topics done till now
	28-1-2025	Black Board Test of some topics
	29-1-2025	Infinite series: Convergence and divergence of Infinite Series
	30-1-2025	Comparison Tests of positive terms Infinite series
	31-1-2025	Cauchy's general principle of Convergence of series
	1-2-2025	Convergence and divergence of geometric series
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	Hyper Harmonic series or p-series.
	4-2-2025	Revision of Unit-2
	5-2-2025	Doubt Class Unit-1 and Unit-2
	6-2-2025	Assignment I to be given based on Unit-1 and Unit-2
	7-2-2025	Test of Unit-1 and Unit-2
	8-2-2025	Infinite series: D-Alembert's ratio test
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	Raabe's test
	11-2-2025	Questions to be discussed on Raabe's test
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	Logarithmic test

	14-2-2025	De Morgan and Bertrand's Test
	15-2-2025	Questions to be discussed on Raabe's test, Logarithmic test,
	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	Questions to be discussed on De Morgan and Bertrand's test
	18-2-2025	Cauchy's Nth root test
	19-2-2025	Questions to be discussed on Cauchy's Nth root test
	20-2-2025	Gauss Test
	21-2-2025	Questions to be discussed on Gauss Test
	22-2-2025	Cauchy's integral test
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	Questions to be discussed on Cauchy's integral test
	25-2-2025	Cauchy's condensation test
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	Questions to be discussed on the topic- Cauchy's condensation test
	28-2-2025	Revision of all these tests
	1-3-2025	Doubt Class
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	Test of all these topics
	4-3-2025	Doubt Class of the three units completed till now
	5-3-2025	Doubt Class of the three units completed till now
	6-3-2025	Definition of Alternating series
	7-3-2025	Leibnitz's test
	8-3-2025	Questions to be discussed
	9-3-2025	S. U. N. D. A. Y.

10	10-3-2025	HOLI BREAK
	11-3-2025	HOLI BREAK
	12-3-2025	HOLI BREAK
	13-3-2025	HOLI BREAK
	14-3-2025	HOLI BREAK
	15-3-2025	HOLI BREAK
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	Absolute and conditional convergence
	18-3-2025	Examples to be discussed on absolute and conditional convergence
	19-3-2025	Arbitrary series: Abel's Lemma
	20-3-2025	Abel's test
	21-3-2025	Examples to be discussed on Abel's test
	22-3-2025	Examples to be discussed on Abel's test
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	Dirichlet's test
	25-3-2025	Insertion and removal of parenthesis
	26-3-2025	Re-arrangement of terms in a series
	27-3-2025	Revision of these topics and Assignment to be given on Unit-III
	28-3-2025	Test to be Taken of Units- I, II, III
	29-3-2025	Assignment to be discussed
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	Assignment to be discussed

	2-4-2025	Assignment to be discussed
	3-4-2025	Results of test to be discussed
	4-4-2025	Doubt Class
	5-4-2025	Dirichlet's theorem
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	Riemann's Re-arrangement theorem
	8-4-2025	Pringsheim's theorem (statement only)
	9-4-2025	Multiplication of series
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Examples to be discussed
	12-4-2025	Cauchy product of series, (definitions and examples only)
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	Examples on the topic- Cauchy product of series to be discussed
	16-4-2025	Examples on the topic- Cauchy product of series to be discussed
	17-4-2025	Examples on the topic- Cauchy product of series to be discussed
	18-4-2025	Convergence and absolute convergence of infinite products
	19-4-2025	Examples to be discussed
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	Test of some important topics
	22-4-2025	Result of Test to be discussed
	23-4-2025	Result of Test to be discussed
	24-4-2025	Doubt Class

	25-4-2025	Doubt Class
	26-4-2025	Doubt Class
	27-4-2025	S. U. N. D. A. Y.
17	28-4-2025	Revision of all the syllabus
	29-4-2025	Revision of all the syllabus
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	Revision of all the syllabus
	02-05-2025	Revision of all the syllabus
	03-05-2025	Revision of all the syllabus
	04-05-2025	S. U. N. D. A. Y.

Geeta Tripathi

Signature