



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Ramkishan

Qualification/ Department: Assistant professor/ Mathematics

CLASS: M.Sc. Mathematics

SEMESTER: II

SECTION: NIL

SUBJECT: Measure and Integration Theory

Week		
1	7-1-2025	NO LECTURE
	8-1-2025	NO LECTURE
	9-1-2025	Introduction to measure theory
	10-1-2025	Set functions, Intuitive idea of measure,
	11-1-2025	Elementary properties of measure
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	Exercise based on topics
	14-1-2025	Continued
	15-1-2025	NO LECTURE
	16-1-2025	NO LECTURE
	17-1-2025	Measurable sets and their fundamental properties.
	18-1-2025	Continued
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	Lebesgue measure of aset of real numbers,
	21-1-2025	Continued
	22-1-2025	NO LECTURE

	23-1-2025	NO LECTURE
	24-1-2025	Algebra of measurable sets, Borel set,
	25-1-2025	Equivalent formulation of measurable set sin terms of open sets and closed sets
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	Non measurable sets.
	28-1-2025	Continued
	29-1-2025	NO LECTURE
	30-1-2025	NO LECTURE
	31-1-2025	Measurable functions and their equivalent formulations.
	1-2-2025	Continued
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	Properties of measurable functions.
	4-2-2025	Continued
	5-2-2025	NO LECTURE
	6-2-2025	NO LECTURE
	7-2-2025	Approximation of a measurable function by a sequence of simple functions,
	8-2-2025	Continued
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	Measurable functions as nearly continuous functions
	11-2-2025	Continued
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	NO LECTURE
	14-2-2025	Egoroff theorem
	15-2-2025	Lusin theorem

	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	Convergence in measure
	18-2-2025	F. Riesz theorem
	19-2-2025	NO LECTURE
	20-2-2025	NO LECTURE
	21-2-2025	Almost uniform convergence.
	22-2-2025	Continued
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	Exercise Question Solved
	25-2-2025	Exercise Question Solved
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	NO LECTURE
	28-2-2025	Exercise questions Solved
	1-3-2025	Short comings of Riemann Integral
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	Lebesgue Integral of a bounded function over a set of finite measure and its properties.
	4-3-2025	Continued
	5-3-2025	NO LECTURE
	6-3-2025	NO LECTURE
	7-3-2025	Continued
	8-3-2025	Lebesgue integral as a generalization of Riemann integral
	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	Bounded convergence theorem
	18-3-2025	Lebesgue theorem regarding points of discontinuities of Riemann integrable functions
	19-3-2025	NO LECTURE
	20-3-2025	NO LECTURE
	21-3-2025	Integral of non-negative functions, Fatou Lemma
	22-3-2025	Monotone convergence theorem
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	General Lebesgue Integral
	25-3-2025	Continued
	26-3-2025	NO LECTURE
	27-3-2025	NO LECTURE
	28-3-2025	Lebesgue convergence theorem.
	29-3-2025	Continued
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	Vitali covering lemma
	2-4-2025	NO LECTURE

	3-4-2025	NO LECTURE
	4-4-2025	Continued
	5-4-2025	Differentiation of monotonic functions
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	Function of bounded variation and its representation as difference of monotonic functions
	8-4-2025	Continued
	9-4-2025	NO LECTURE
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Continued
	12-4-2025	Differentiation of indefinite integral
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	Continued
	16-4-2025	NO LECTURE
	17-4-2025	NO LECTURE
	18-4-2025	Continued
	19-4-2025	Continued
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	Fundamental theorem of calculus,
	22-4-2025	Continued
	23-4-2025	NO LECTURE
	24-4-2025	NO LECTURE
	25-4-2025	Absolutely continuous functions and their properties.

	26-4-2025	Continued
	27-4-2025	S. U. N. D. A. Y.
17	28-4-2025	Continued
	29-4-2025	Revision
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	NO LECTURE
	02-05-2025	Revision
	03-05-2025	Revision
	04-05-2025	S. U. N. D. A. Y.

Signature