## Pt. CLS Govt. college karnal **LESSON PLAN** SESSION 2023-24 (01.01.2024 to 30.04.2024) Weekly Lesson Plan (Even Semester) Name of the Paper:- SEQUENCES AND SERIES Class: B.sc 4th sem. Name of the Teachers (Section A&B) : Kawaljeet singh TOPICS WEEK DATE Sets **Bounded and Unbounded Sets** Least upper bound and Greatest lower bound January 1 Theorems (1-6) Theorems Revise SUNDAY - 07.01.2024 Examples Problem Discussion Neighbourhood of a Point January 2 Theorems (8-13) Problems Test SUNDAY - 14.01.2024 Examples Interior Point of a Set January Open Set (15-16) 3 Theorems January **Closed Sets** (18-20) Examples HOLIDAY - 17.01.2024-SHRI GURU GOBIND SINGH JI JAYANTI SUNDAY - 21.01.2024 Limit Point January Closures (22-25) Δ Theorems January Problems (27) TEST HOLIDAY - 26.01.2024 - REPUBLIC DAY SUNDAY - 28.01.2024 **Bolzano Weierstrass Theorem** Theorems January

_ ·	(29-31)	Examples
5	February	Compact Set
	(1-3)	Cover and Open Cover
		Revision
		SUNDAY - 04.02.2024
	oruary (5-10)	Theorems
		Examples
6		Convergent Sequence and Divergent Sequence
o		Oscillatory Sequence
		Examples
		Problems
		SUNDAY - 11.02.2024
	oruary.	Basic Theorems of limits and Squeeze Principle
	bruary (12-13) bruary (15-17)	Cauchy First Theorem
7		Cauchy Second Theorem
		Examples
		Problems
H	OLIDAY 14.02.2	2024 - BASANT PANCHMI/SIR CHHOTU RAM JAYANTI
		SUNDAY - 18.02.2024
	oruary (19-24)	MONOTONIC SEQUENCE
		Nested sequence
8		Examples
U		Limit Point of a Sequence
		Cauchy Sequence
		Examples
		SUNDAY - 25.02.2024
		Cauchy Sequence
	oruary	Problem Discussion
9	(26-29)	Test
	larch	Infinite Series
	(1-2)	Examples
		PROBLEM
		SUNDAY - 03.03.2024
	lovek	cauchy 's general principle of convergence Geometric Series
	larch	
10	(4-7) Iarch	Series of Positive terms
	larch	Comparison Test, p-series Test
	(9)	Examples
		Revision
	НО	<u> 2110AY - 08.03.2024 - MAHA SHIVRATRI</u>
		SUNDAY - 10.03.2024 Problems
I		

		D'Alemberts Ratio Test and Examples	
11	larch	Cauchy Root Test and Examples	
	(11-16)	Raabes Test and Examples	
		Logarithmic Test and Examples	
		De Morgan's Test and Gauss Test	
	I	SUNDAY - 17.03.2024	
12		Problem disscussion	
		Problem disscussion	
	larch	Cauchy Integral Test and Cauchy Condensation Test	
	(18-22)	Alternating Series, Leibnitz's Test	
		Absolute and Conditional Convergence	
		problem	
	НО	LI VACATION - 23.03.2024 - 31.03.2024	
		(SHAHEEDI DIWAS - 23.03.2024)	
13		Arbitrary Series, Abels Lemma, Abels Test	
	April	Examples	
	(1-6)	Dirichlet's Test and Examples	
13	(1-0)	Examples	
		Problem	
		SUNDAY - 07.04.2024	
	April	Insertion and Removal of Parenthesis	
	(8-10)	Examples	
14	April	Riemann Arrangement Theorem	
	(12-13)	Multiplication of Series	
		Revision	
		Test	
		HOLIDAY - 11.04.2024 - ID-UL-FITR	
		SUNDAY - 14.04.2024	
	April	Cauchy Theorem Mertin's Theorem and Examples	
15	(15-16)	· · · · · · · · · · · · · · · · · · ·	
15	April (18.20)	Cauchy Theorem Mertin's Theorem and Examples	
	(18-20)	· · · · · · · · · · · · · · · · · · ·	
		HOLIDAY - 17.04.2024 - RAM NAVMI SUNDAY - 21.04.2024	
		Infinite Product	
		Sequence of Partial Sum	
16	April	General Principle of Convergence	
	(22-27)	Theorems and Examples	
		More Theorems on Infinite Product	
		Examples and Problems	

SUNDAY - 28.04.2024				
17	April (29-30)	Examples and Problems		
		Revision		
		Revision		
		Test		
University Examinations w.e.f. 01.05.2024				