

I – Academic Planner

A. Teaching Plan (Year: August 2020 Semester: Odd)

Teacher's Name: Dr. Dinesh Khattar

Department: Mathematics

S. No.	UPC	Paper Name	Core/AECC/GE/SEC	Topic/Unit	Start Date	End Date
1.	32351302	Group Theory 1 (B.Sc. (Hons.) Mathematics IIIrd Semester)	CORE	Symmetries, Dihedral Groups, Groups, Subgroups, centralizer and normalizer, Product of two groups, cyclic groups, Subgroups of cyclic groups	10 August' 2020	15 September'2020
				Permutation groups, alternating group, cosets, Lagrange's theorem, External direct products, normal Subgroups, factor groups	16 September'2020	22 October'2020
				Group homomorphism, Cayley's theorem, Properties of isomorphism, Isomorphism theorems	23 October' 2020	27 November' 2020
2.	32351301	Theory of Real Functions (B.Sc. (Hons.) Mathematics IIIrd Semester)	CORE	Limits of functions, Infinite limits and limits at infinity, continuous functions, sequential criteria, algebra of continuous functions, intermediate value theorem, location of roots theorem	10 August' 2020	22 September'2020
				Uniform Continuity, differentiability of a function, algebra of differentiable functions, Relative extrema, Mean value theorem and its applications	23 September'2020	29 October'2020
				Taylor's theorem with Lagrange's form of remainder and Cauchy's form of remainder, Taylor's series and Maclaurin's series expansion	30 October' 2020	27 November' 2020

Teaching Plan (Year: 2021 Semester: Even)

Teacher's Name: Dr. Dinesh Khattar

Department: Mathematics

S. No.	UPC	Paper Name	Core/AECC/GE/SEC	Topic/Unit	Start Date	End Date
1.	32351403	Ring Theory & Linear Algebra I (B.Sc. (Hons.) Mathematics IVth Semester)	CORE	Rings, subrings, integral domain and fields, Ideals, factor rings, maximal and prime Ideals, ring homomorphism, factor rings	02 January' 2021	03 February' 2021
				Vector spaces, subspaces, quotient spaces, Linear span, linear independence, basis, dimension of subspaces	04 February' 2021	28 March' 2021
				Linear transformation, rank, nullity, matrix Representation, isomorphism, Isomorphism theorems, change of coordinate matrix	31 March' 2021	29 April' 2021
2.	32351602	Ring Theory & Linear Algebra II (B.Sc. (Hons.) Mathematics VIth Semester)	CORE	Polynomial rings, principal ideal Domain, reducibility tests, divisibility in Integral domains, irreducibles, primes, unique factorization domains, Euclidean domains	02 January' 2021	08 February' 2021
				Dual spaces, dual basis, double dual, Transpose of linear transformation, Annihilators, Eigen spaces, Diagonalizability, minimal polynomial	09 February' 2021	28 March' 2021
				Inner product spaces, norms, Gram- Schmidt Orthogonalization process, adjoint of linear Operator, minimal solutions to system of equations, normal and self- adjoint operators, orthogonal projections, Spectral theorem	31 March' 2021	29 April' 2021

B. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Teachers

Event Topic	
Type / Nature (FDP/Webinar/Workshop etc.)	
Organizing In-charge	
Details regarding invited Resource Person	
Nature of Participation (e.g. Invited Speaker, Participant etc.)	

Date/s		Timing/s		Mode	
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C. Internal Assessment: House Exam (Test/Presentation etc.) & Assignment*

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
563	B.Sc. (Hons.) Mathematics (IIIrd Semester)	32351302	Groups, cyclic groups, permutation groups, cosets, normal subgroups	02 November' 2020	14 November' 2020
563	B.Sc. (Hons.) Mathematics (IIIrd Semester)	32351301	Limit of functions, limits at infinity, continuous functions, uniform continuity, differentiability	05 November' 2020	20 November' 2020

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
563	B.Sc. (Hons.) Mathematics (IVth Semester)	32351403	Rings, subrings, fields, ideals, ring homomorphism, factor rings	05 April' 2021	20 April' 2021
563	B.Sc. (Hons.) Mathematics (VIth Semester)	32351602	Polynomial rings, integral domains, Euclidean domain, principal ideal domain, unique factorization domain	31 March' 2021	06 April' 2021

*Marks of the Internal Assessment to be submitted to the College 15 days before the last working day of every semester

D. Organization of Department/College Society Meetings by Staff Advisor/Convener

Department/Society	Meeting Date	Purpose

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E. College Functions

College Function	Function Date	Role to be played