

Govt. College Safidon
LESSON-PLAN (Session 2022-23) EVEN SEMESTER

Name of Teacher: Sanyogita
Designation: extension lecturer
Subject- Algebra
Class: B.A 1st 2nd sem.

Subject/Paper: Sr. No.	Months	Topics to be covered	Remarks if any,
1	February	.Matrices , Orthogonal and unitary matrices Rank of matrix	Group discussion
2	March	Eigen value ,Eigen vector and Characteristic equations of matrix, Relation between the root and coefficient	Assignment
3	April	. Transformation of an equation, sol. Of cubic and biquadratic equation	Unit Test
4	May	Fermat, Wilson , Euler, Chinese remainder Theorem	Revision

Govt. College Safidon
LESSON-PLAN (Session 2022-23) EVEN SEMESTER

Name of Teacher : Sanyogita
 Designation : Extension lecturer
 Subject : Business Mathematics
 Class : Bcom 1st

Subject/Paper: Sr. No.	Months	Topics to be covered	Remarks if any,
1	February	Permutation and combinations, Binomial Theorem, Linear inequalities.	Group discussion
2	March	Linear Programming: Formulation of equations, graphical method of solutions, problem relating to two variables including the case of mixed constraints, cases having no solution, multiple solution, unbounded solution and redundant constraints.	Assignment
3	April	Data Representation and Interpretation : Introduction, Classification and Tabulation of data: Diagrammatic and graphical representation of data: Significance of diagrams and graphs.	Unit Test
4	May	Type of diagrams : Bar diagram, pie chart, pictographs, graphs of time series or line graphs, graphs of frequency distribution, histogram, frequency polygon, ogives or commulative frequency curves.	Revision

Govt. College Safidon

LESSON-PLAN (Session 2022-23) EVEN SEMESTER

Name of Teacher: Sanyogita

Designation: Extension lecturer

Subject: Sequences and Series

Class: B.A 4th sem

Subject/Paper: Sr. No.	Months	Topics to be covered	Remarks if any,
1	February	Boundedness of the set of real numbers, least upper bound, greatest lower bound of a set neighbourhood, interior points, isolated points, limit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties. Bolzano-weirstrass theorem. open covers. compact sets and Heine-Borel theorem.	Group discussion
2	March	Real sequences and their convergence, theorems on limits of sequence, bounded and monotonic sequences, Cauchy's sequence, Cauchy's general principle of convergence, subsequences, subsequential limits. convergence and divergence of infinite series, comparison test of positive terms in finite series, Cauchy's general principle of convergence of series, convergence and divergence of geometric series. Hyper harmonic series and p series.	Assignment
3	April	D'Alembert's ratio test, Raabe's test, Logarithmic test, de Morgan and Bertrand's test, Cauchy's nth root test, Gauss test, Cauchy's integral test. Cauchy's condensation test. Leibnitz's test, absolute and conditional convergence.	Unit Test
4	May	Arbitrary series: Abel's lemma, Abel's test, Dirichlet's test, insertion and removal of Parentheses, rearrangement of terms in a series, Dirichlet's theorem, Riemann's rearrangement theorem. Multiplication of series, Cauchy product of series, convergence and absolute convergence of infinite products.	Revision

*Vacation as per university calendar

- 2 assignments and 01 unit test will be taken as per schedule.

Govt College Safidon
LESSON-PLAN (Session 2022-23) EVEN SEMESTER

Name of Teacher: Sanyogita
Designation: Extension lecturer
Subject: REAL & COMPLEX ANALYSIS
Class: B.A. 6th Sem

Subject/Paper: Sr. No.	Months	Topics to be covered	Remarks if any,
1	February	Jacobians, Beta and Gama functions, Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals.	Group discussion
2	March	Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Coefficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier series for even and odd functions, Half range series, Change of Intervals . Extended Complex Plane, Stereographic projection of complex numbers.	ASSIGNMENT
3	April	Continuity and differentiability of complex functions, Analytic functions, Cauchy-Riemann equations. Harmonic functions. Mappings by elementary functions: Translation, rotation, Magnification and Inversion.	UNIT TEST
4	May	Conformal Mappings, Mobius transformations. Fixed points, Cross ratio, Inverse Points and critical mappings.	REVISION

*Vacation as per university calendar

2 assignments and 01 unit test will be taken as per schedule