

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

LESSON PLAN

SESSION: 2022-2023

Faculty Name: GURVINDER SINGH

Class/Semester: B. A. / 1ST SEMESTER

Subject: ALGEBRA

Commencement Date: 22.08.2022

S. N.	TOPIC	PROPOSED DATE
	UNIT I	22.08.2022
1.	MATRICES - A REVIEW	
2.	REVIEW OF BASIC CONCEPTS	23.08.2022
3.	SOME RESULTS ON ADJOINT AND INVERSE OF A MATRIX	24.08.2022
4.	- RELATED SOLVED EXAMPLES	25.08.2022
5.	SYMMETRIC & SKEW-SYMMETRIC MATRICES -RELATED RESULTS	26.08.2022
6.	HERMITIAN & SKEW-HERMITIAN MATRICES -RELATED RESULTS	27.08.2022
7.	RELATED SOLVED EXAMPLES	29.08.2022
8.	RELATED SOLVED EXAMPLES	30.08.2022
9.	RANK OF A MATRIX -RELATED RESULTS & SOLVED EXAMPLES	31.08.2022
10.	RELATED SOLVED EXAMPLES	01.09.2022
11.	ELEMENTARY OPERATIONS, EQUIVALENT MATRICES -RELATED RESULTS & SOLVED EXAMPLES	02.09.2022
12.	ROW/COLUMN ECHELON MATRIX	03.09.2022
13.	RELATED SOLVED EXAMPLES	05.09.2022
14.	EXERCISE PROBLEMS	06.09.2022
15.	EXERCISE PROBLEMS	07.09.2022
16.	NORMAL FORM OF A MATRIX, ELEMENTARY MATRICES -RELATED SOLVED EXAMPLES	08.09.2022
17.	RELATED SOLVED EXAMPLES	09.09.2022
18.	SOLVED EXAMPLES ON 'FINDING THE INVERSE OF A MATRIX USING THE ELEMENTARY OPERATIONS	10.09.2022
19.	SOLVED EXAMPLES ON 'FINDING THE NON-SINGULAR MATRICES P & Q SUCH THAT PAQ IS IN NORMAL FORM'	12.09.2022
20.	EXERCISE PROBLEMS	13.09.2022

21.	EXERCISE PROBLEMS	14.09.2022
22.	LINEAR DEPENDENCE & INDEPENDENCE -RELATED SOLVED EXAMPLES	15.09.2022
23.	RELATED RESULTS	16.09.2022
24.	RELATED RESULTS	17.09.2022
25.	EXERCISE PROBLEMS	19.09.2022
26.	EIGEN VALUES AND EIGEN VECTORS -RELATED SOLVED EXAMPLES	20.09.2022
27.	RELATED SOLVED EXAMPLES	21.09.2022
28.	CALEY -HAMILTON THEOREM -RELATED SOLVED EXAMPLES	22.09.2022
29.	RELATED RESULTS	24.09.2022
30.	RELATED RESULTS	27.09.2022
31.	MINIMAL POLYNOMIAL, DEROGATORY & NON-DEROGATORY MATRICES -RELATED RESULTS	28.09.2022
32.	RELATED EXAMPLES, EXERCISE PROBLEMS	29.09.2022
33.	EXERCISE PROBLEMS	30.09.2022
34.	UNIT II SOLUTION OF NON-HOMOGENEOUS LINEAR EQUATIONS BY USING THE CONCEPT OF RANK	01.10.2022
35.	RELATED SOLVED EXAMPLES	03.10.2022
36.	SOLUTION OF HOMOGENEOUS LINEAR EQUATIONS BY USING THE CONCEPT OF RANK	04.10.2022
37.	RELATED SOLVED EXAMPLES	06.10.2022
38.	EXERCISE PROBLEMS	07.10.2022
39.	ORTHOGONAL AND UNITARY MATRICES -RELATED RESULTS	08.10.2022
40.	RELATED RESULTS & SOLVED EXAMPLES	10.10.2022
41.	RELATED SOLVED EXAMPLES	11.10.2022
42.	TEST	12.10.2022
43.	EXERCISE PROBLEMS	13.10.2022
44.	BILINEAR FORM MATRIX NOTATION AND CANONICAL FORM	14.10.2022
45.	RELATED SOLVED EXAMPLES	15.10.2022
46.	QUADRATIC FORM -RELATED RESULTS & SOLVED EXAMPLES	17.10.2022
47.	DIAGONALISATION OF A QUADRATIC FORM -RELATED RESULTS & SOLVED EXAMPLES	18.10.2022
48.	FACTORABLE QUADRATIC FORMS -RELATED RESULTS & SOLVED EXAMPLES	19.10.2022
49.	EXERCISE PROBLEMS	20.10.2022
50.	UNIT III POLYNOMIAL, POLYNOMIAL EQUATION, SYNTHETIC DIVISION	21.10.2022

51.	RELATED RESULTS & SOLVED EXAMPLES	22.10.2022
52.	RELATED SOLVED EXAMPLES	26.10.2022
53.	FUNDAMENTAL THEOREM OF ALGEBRA -RELATED RESULTS & SOLVED EXAMPLES	27.10.2022
54.	RELATION BETWEEN ROOTS & COEFFICIENTS OF AN EQUATION -RELATED SOLVED EXAMPLES	28.10.2022
55.	RELATED SOLVED EXAMPLES	29.10.2022
56.	RELATED SOLVED EXAMPLES	31.10.2022
57.	EXERCISE PROBLEMS	02.11.2022
58.	EXERCISE PROBLEMS	03.11.2022
59.	TEST	04.11.2022
60.	COMMON ROOTS & MULTIPLE ROOTS -RELATED RESULTS & SOLVED EXAMPLES	05.11.2022
61.	RELATED SOLVED EXAMPLES	07.11.2022
62.	EXERCISE PROBLEMS	09.11.2022
63.	TRANSFORMATION OF EQUATIONS -RELATED RESULTS & SOLVED EXAMPLES	10.11.2022
64.	DIMINISHING THE ROOTS, REMOVAL OF TERMS -RELATED SOLVED EXAMPLES	11.11.2022
65.	TRANSFORMATION IN GENERAL -RELATED SOLVED EXAMPLES	12.11.2022
66.	EQUATION OF SQUARED DIFFERENCES OF A CUBIC -RELATED SOLVED EXAMPLES	14.11.2022
67.	EXERCISE PROBLEMS	15.11.2022
68.	EXERCISE PROBLEMS	16.11.2022
69.	UNIT IV CARDON'S METHOD	17.11.2022
70.	RELATED SOLVED EXAMPLES	18.11.2022
71.	RELATED SOLVED EXAMPLES	19.11.2022
72.	EXERCISE PROBLEMS	21.11.2022
73.	TEST	22.11.2022
74.	DESCARTES' METHOD	23.11.2022
75.	RELATED SOLVED EXAMPLES	24.11.2022
76.	FERRARI' METHOD	25.11.2022
77.	RELATED SOLVED EXAMPLES	26.11.2022
78.	DESCARTES' RULE OF SIGNS	28.11.2022
79.	RELATED SOLVED EXAMPLES	29.11.2022
80.	EXERCISE PROBLEMS	30.11.2022
81.	EXERCISE PROBLEMS	01.12.2022
82.	TEST	02.12.2022
83.	GROUP DISCUSSION /PRESENTATIONS	03.12.2022
84.	GROUP DISCUSSION /PRESENTATIONS	05.12.2022

85.	REVISION	06.12.2022
86.	REVISION	07.12.2022
87.	REVISION	08.12.2022
88.	REVISION	09.12.2022
89.	REVISION	10.12.2022
90.	REVISION	12.12.2022
91.	REVISION	13.12.2022
92.	REVISION	14.12.2022

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

LESSON PLAN

SESSION: 2022-2023

Faculty Name: GURVINDER SINGH

Class/Semester: B. A. / 3rd SEMESTER

Subject: PARTIAL DIFFERENTIAL EQUATIONS

Commencement Date: 16.08.2022

S. N.	TOPIC	PROPOSED DATE
1.	UNIT I PARTIAL DIFFERENTIAL EQUATIONS -BASIC CONCEPTS	16.08.2022
2.	FORMATION OF PDE BY ELIMINATING THE ARBITRARY CONSTANTS -RELATED SOLVED EXAMPLES	17.08.2022
3.	RELATED SOLVED EXAMPLES	19.08.2022
4.	FORMATION OF PDE BY ELIMINATING THE ARBITRARY FUNCTIONS -RELATED SOLVED EXAMPLES	20.08.2022
5.	RELATED SOLVED EXAMPLES	22.08.2022
6.	EXERCISE PROBLEMS	23.08.2022
7.	EXERCISE PROBLEMS	24.08.2022
8.	CLASSIFICATION OF SOLUTION OF LINEAR PDE, LAGRANGE'S LINEAR EQUATION	25.08.2022
9.	SOLUTION OF LAGRANGE'S LINEAR EQUATION -RELATED SOLVED EXAMPLES	26.08.2022
10.	RELATED SOLVED EXAMPLES	27.08.2022
11.	RELATED SOLVED EXAMPLES	29.08.2022
12.	EXERCISE PROBLEMS	30.08.2022
13.	EXERCISE PROBLEMS	31.08.2022
14.	COMPATIBLE SYSTEM OF PDE OF ORDER ONE, CONDITION OF COMPATIBILITY -RELATED SOLVED EXAMPLES	01.09.2022
15.	RELATED SOLVED EXAMPLES	02.09.2022
16.	SOLUTION OF SOME STANDARD FORMS OF EQUATIONS -RELATED SOLVED EXAMPLES	03.09.2022
17.	RELATED SOLVED EXAMPLES	05.09.2022
18.	RELATED SOLVED EXAMPLES	06.09.2022
19.	RELATED SOLVED EXAMPLES	07.09.2022
20.	EXERCISE PROBLEMS	08.09.2022

21.	EXERCISE PROBLEMS	09.09.2022
22.	JACOBI'S METHOD -RELATED SOLVED EXAMPLES	10.09.2022
23.	RELATED SOLVED EXAMPLES	12.09.2022
24.	EXERCISE PROBLEMS	13.09.2022
25.	UNIT II SOLUTION OF HOMOGENEOUS LINEAR PDE WITH CONSTANT COEFFICIENTS, WORKING RULE TO FIND C.F.	14.09.2022
26.	METHODS TO FIND P.I. -RELATED SOLVED EXAMPLES	15.09.2022
27.	RELATED SOLVED EXAMPLES	16.09.2022
28.	RELATED SOLVED EXAMPLES	17.09.2022
29.	RELATED SOLVED EXAMPLES	19.09.2022
30.	TEST	20.09.2022
31.	SOLUTION OF NON-HOMOGENEOUS LINEAR PDE WITH CONSTANT COEFFICIENTS -RELATED SOLVED EXAMPLES	21.09.2022
32.	RELATED SOLVED EXAMPLES	22.09.2022
33.	EXERCISE PROBLEMS	24.09.2022
34.	EXERCISE PROBLEMS	27.09.2022
35.	PDE WITH VARIABLE COEFFICIENTS & REDUCIBLE TO EQUATIONS WITH CONSTANT COEFFICIENTS -RELATED SOLVED EXAMPLES	28.09.2022
36.	RELATED SOLVED EXAMPLES	29.09.2022
37.	EXERCISE PROBLEMS	30.09.2022
38.	UNIT III CLASSIFICATION OF 2ND ORDER LPD -RELATED SOLVED EXAMPLES	01.10.2022
39.	CANONICAL FORM -REDUCTION OF HYPERBOLIC EQUATIONS TO CANONICAL FORM	03.10.2022
40.	RELATED SOLVED EXAMPLES	04.10.2022
41.	REDUCTION OF PARABOLIC EQUATIONS TO CANONICAL FORM -RELATED SOLVED EXAMPLES	06.10.2022
42.	REDUCTION OF ELLIPTIC EQUATIONS TO CANONICAL FORM -RELATED SOLVED EXAMPLES	07.10.2022
43.	RELATED SOLVED EXAMPLES	08.10.2022
44.	TEST	10.10.2022
45.	SOLUTION OF LINEAR HYPERBOLIC EQUATIONS	11.10.2022
46.	RELATED SOLVED EXAMPLES	12.10.2022
47.	RELATED SOLVED EXAMPLES, EXERCISE PROBLEMS	13.10.2022
48.	EXERCISE PROBLEMS	14.10.2022
49.	EXERCISE PROBLEMS	15.10.2022
50.	MONGE'S METHOD-RELATED SOLVED EXAMPLES	17.10.2022

51.	RELATED SOLVED EXAMPLES	18.10.2022
52.	RELATED SOLVED EXAMPLES	19.10.2022
53.	RELATED SOLVED EXAMPLES, EXERCISE PROBLEMS	20.10.2022
54.	EXERCISE PROBLEMS	21.10.2022
55.	CHARACTERISTICS EQUATION & CHARACTERISTIC CURVES -RELATED SOLVED EXAMPLES	22.10.2022
56.	UNIT IV CAUCHY'S PROBLEM -RELATED SOLVED EXAMPLES	26.10.2022
57.	-RELATED SOLVED EXAMPLES	27.10.2022
58.	EXERCISE PROBLEMS	28.10.2022
59.	ONE-DIMENSIONAL WAVE EQUATION -SOLUTION BY METHOD OF SEPARATION OF VARIABLES	29.10.2022
60.	RELATED RESULTS & SOLVED EXAMPLES	31.10.2022
61.	RELATED SOLVED EXAMPLES	02.11.2022
62.	RELATED SOLVED EXAMPLES	03.11.2022
63.	EXERCISE PROBLEMS	04.11.2022
64.	EXERCISE PROBLEMS	05.11.2022
65.	TEST	07.11.2022
66.	SOLUTION OF TWO -DIMENSIONAL WAVE EQUATION -RELATED RESULTS & SOLVED EXAMPLES	09.11.2022
67.	RELATED RESULTS & SOLVED EXAMPLES	10.11.2022
68.	SOLUTION OF ONE -DIMENSIONAL HEAT EQUATION -RELATED RESULTS & SOLVED EXAMPLES	11.11.2022
69.	RELATED RESULTS & SOLVED EXAMPLES	12.11.2022
70.	EXERCISE PROBLEMS	14.11.2022
71.	EXERCISE PROBLEMS	15.11.2022
72.	SOLUTION OF TWO -DIMENSIONAL HEAT EQUATION -RELATED RESULTS & SOLVED EXAMPLES	16.11.2022
73.	RELATED RESULTS & SOLVED EXAMPLES	17.11.2022
74.	RELATED RESULTS & SOLVED EXAMPLES	18.11.2022
75.	SOLUTION OF LAPLACE EQUATION -RELATED RESULTS & SOLVED EXAMPLES	19.11.2022
76.	RELATED RESULTS & SOLVED EXAMPLES	21.11.2022
77.	EXERCISE PROBLEMS	22.11.2022
78.	EXERCISE PROBLEMS	23.11.2022
79.	TEST	24.11.2022
80.	GROUP DISCUSSION /PRESENTATIONS	25.11.2022
81.	GROUP DISCUSSION /PRESENTATIONS	26.11.2022
82.	REVISION	28.11.2022
83.	REVISION	29.11.2022
84.	REVISION	30.11.2022
85.	REVISION	01.12.2022

86.	REVISION	02.12.2022
87.	REVISION	03.12.2022
88.	REVISION	05.12.2022
89.	REVISION	06.12.2022
90.	REVISION	07.12.2022
91.	REVISION	08.12.2022
92.	REVISION	09.12.2022
93.	REVISION	10.12.2022

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

LESSON PLAN

SESSION: 2022-2023

Faculty Name: GURVINDER SINGH

Class/Semester: B.A./5th SEMESTER

Subject: GROUPS AND RINGS

Commencement Date: 16.08.2022

S. N.	TOPIC	PROPOSED DATE
	UNIT I	16.08.2022
1.	BINARY OPERATION -FUNDAMENTAL PROPERTIES	
2.	COMPOSITION TABLE, ALGEBRAIC STRUCTURE, GROUP	17.08.2022
3.	FINITE /INFINITE GROUP, ORDER OF A GROUP -RELATED SOLVED EXAMPLES	19.08.2022
4.	RELATED SOLVED EXAMPLES	20.08.2022
5.	RELATED SOLVED EXAMPLES	22.08.2022
6.	GENERAL PROPERTIES OF GROUPS	23.08.2022
7.	RELATED SOLVED EXAMPLES	24.08.2022
8.	RELATED SOLVED EXAMPLES	25.08.2022
9.	ORDER OF AN ELEMENT OF A GROUP -RELATED RESULTS	26.08.2022
10.	RELATED RESULTS & SOLVED EXAMPLES	27.08.2022
11.	RELATED RESULTS & SOLVED EXAMPLES	29.08.2022
12.	SUB-GROUPS, CRITERION FOR A SUBSET TO BE A SUBGROUP -RELATED RESULTS	30.08.2022
13.	RELATED RESULTS	31.08.2022
14.	RELATED RESULTS	01.09.2022
15.	RELATED SOLVED EXAMPLES	02.09.2022
16.	RELATED SOLVED EXAMPLES	03.09.2022
17.	CYCLIC GROUPS -RELATED RESULTS	05.09.2022
18.	RELATED RESULTS	06.09.2022
19.	RELATED RESULTS	07.09.2022
20.	RELATED SOLVED EXAMPLES	08.09.2022
21.	COSETS -RELATED RESULTS	09.09.2022
22.	RELATED RESULTS AND SOLVED EXAMPLES	10.09.2022

23.	RELATED SOLVED EXAMPLES	12.09.2022
24.	INDEX OF A SUB-GROUP, LAGRANGE'S THEOREM	13.09.2022
25.	RELATED RESULTS	14.09.2022
26.	NORMAL SUBGROUPS - RELATED RESULTS	15.09.2022
27.	RELATED RESULTS	16.09.2022
28.	QUOTIENT GROUP -RELATED RESULTS AND SOLVED EXAMPLES	17.09.2022
29.	EXERCISE PROBLEMS	19.09.2022
30.	EXERCISE PROBLEMS	20.09.2022
31.	UNIT II GROUP HOMOMORPHISM AND ISOMORPHISM -RELATED RESULTS AND SOLVED EXAMPLES	21.09.2022
32.	KERNEL OF HOMOMORPHISM -RELATED RESULTS	22.09.2022
33.	THEOREMS ON HOMOMORPHISM	24.09.2022
34.	THEOREMS ON HOMOMORPHISM	27.09.2022
35.	GROUP AUTOMORPHISM -RELATED RESULTS AND SOLVED EXAMPLES	28.09.2022
36.	TEST	29.09.2022
37.	GROUP OF AUTOMORPHISMS, INNER AUTOMORPHISM	30.09.2022
38.	RELATED RESULTS AND SOLVED EXAMPLES	01.10.2022
39.	RELATED RESULTS AND SOLVED EXAMPLES	03.10.2022
40.	CENTRE OF A GROUP CHARACTERISTICS SUBGROUP -RELATED RESULTS AND SOLVED EXAMPLES	04.10.2022
41.	RELATED RESULTS & SOLVED EXAMPLES	06.10.2022
42.	NORMALIZER OF A GROUP, DERIVED GROUP -RELATED RESULTS & SOLVED EXAMPLES	07.10.2022
43.	RELATED RESULTS & SOLVED EXAMPLES	08.10.2022
44.	PERMUTATION -BASIC CONCEPTS	10.10.2022
45.	PERMUTATION GROUP, CYCLIC PERMUTATION -RELATED RESULTS & SOLVED EXAMPLES	11.10.2022
46.	EVEN AND ODD PERMUTATIONS, ALTERNATING GROUP -RELATED RESULTS & SOLVED EXAMPLES	12.10.2022
47.	EXERCISE PROBLEMS	13.10.2022
48.	EXERCISE PROBLEMS	14.10.2022
49.	UNIT III RING, DIVISION RING, FIELD AND INTEGRAL DOMAIN	15.10.2022
50.	RELATED RESULTS & SOLVED EXAMPLES	17.10.2022
51.	RELATED RESULTS & SOLVED EXAMPLES	18.10.2022
52.	SUB-RING, CENTRE OF A RING, CHARACTERISTIC OF A RING -RELATED RESULTS AND SOLVED EXAMPLES	19.10.2022
53.	RELATED RESULTS AND SOLVED EXAMPLES	20.10.2022

54.	IDEAL OF A RING, IDEAL GENERATED BY A SET	21.10.2022
55.	SUM AND PRODUCT AND INTERSECTION OF IDEALS -RELATED RESULTS	22.10.2022
56.	PRINCIPAL IDEAL AND PRINCIPAL IDEAL DOMAIN -RELATED RESULTS	26.10.2022
57.	TEST	27.10.2022
58.	MAXIMAL AND PRIME IDEALS -RELATED RESULTS	28.10.2022
59.	RELATED RESULTS AND SOLVED EXAMPLES	29.10.2022
60.	QUOTIENT RING -RELATED RESULTS AND SOLVED EXAMPLES	31.10.2022
61.	HOMOMORPHISM OF RINGS, KERNEL OF HOMOMORPHISM -RELATED RESULTS AND SOLVED EXAMPLES	02.11.2022
62.	RELATED RESULTS & SOLVED EXAMPLES	03.11.2022
63.	EMBEDDING OF RINGS -RELATED RESULTS AND SOLVED EXAMPLES	04.11.2022
64.	RELATED RESULTS & SOLVED EXAMPLES	05.11.2022
65.	EXERCISE PROBLEMS	07.11.2022
66.	UNIT IV DIVISIBILITY, UNIT, ASSOCIATES, PRIME AND IRREDUCIBLE ELEMENTS IN RINGS -RELATED DEFINITIONS AND RESULTS	09.11.2022
67.	PROPER & IMPROPER DIVISORS, G.C.D. AND L.C.M. -RELATED RESULTS	10.11.2022
68.	EUCLIDEAN RINGS --RELATED RESULTS AND SOLVED EXAMPLES	11.11.2022
69.	RELATED RESULTS AND SOLVED EXAMPLES	12.11.2022
70.	RELATED RESULTS AND SOLVED EXAMPLES	14.11.2022
71.	RELATED RESULTS AND SOLVED EXAMPLES	15.11.2022
72.	TEST	16.11.2022
73.	POLYNOMIAL AND POLYNOMIAL RING OVER A RING -RELATED RESULTS AND SOLVED EXAMPLES	17.11.2022
74.	POLYNOMIAL RING OVER AN INTEGRAL DOMAIN /A FIELD -RELATED RESULTS	18.11.2022
75.	DIVISIBILITY OF POLYNOMIALS, DIVISION ALGORITHM -RELATED RESULTS	19.11.2022
76.	RELATED RESULTS AND SOLVED EXAMPLES	21.11.2022
77.	UNIQUE FACTORIZATION DOMAIN -RELATED RESULTS	22.11.2022
78.	RELATED RESULTS	23.11.2022
79.	PRIMITIVE POLYNOMIAL -RELATED RESULTS	24.11.2022
80.	RELATED RESULTS	25.11.2022
81.	EISENSTEIN'S IRREDUCIBILITY CRITERION	26.11.2022

	-RELATED RESULTS AND SOLVED EXAMPLES	
82.	RELATED SOLVED EXAMPLES	28.11.2022
83.	EXERCISE PROBLEMS	29.11.2022
84.	GROUP DISCUSSION /PRESENTATIONS	30.11.2022
85.	GROUP DISCUSSION /PRESENTATIONS	01.12.2022
86.	TEST	02.12.2022
87.	REVISION	03.12.2022
88.	REVISION	05.12.2022
89.	REVISION	06.12.2022
90.	REVISION	07.12.2022
91.	REVISION	08.12.2022
92.	REVISION	09.12.2022
93.	REVISION	10.12.2022

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

LESSON PLAN

SESSION: 2022-2023

FACULTY NAME: GURVINDER SINGH

CLASS/SEMESTER: B. COM. / 3RD SEMESTER

SUBJECT: BUSINESS STATISTICS

COMMENCEMENT DATE: 16.08.2022

S. N.	TOPIC	PROPOSED DATE
	UNIT I	16.08.2022
1.	STATISTICS, ORIGIN, MEANING, FEATURES	
2.	SCOPE, FUNCTIONS & IMPORTANCE OF STATISTICS	17.08.2022
3.	LIMITATIONS AND DISTRUST OF STATISTICS	19.08.2022
4.	COLLECTION OF DATA, PRIMARY AND SECONDARY DATA -METHODS OF COLLECTING PRIMARY DATA	20.08.2022
5.	METHODS OF COLLECTING PRIMARY DATA	22.08.2022
6.	METHODS OF COLLECTING SECONDARY DATA, ROUNDING OFF DATA	23.08.2022
7.	OBJECTIVES AND METHODS OF CLASSIFICATION OF DATA	24.08.2022
8.	WAYS TO CLASSIFY NUMERICAL DATA	25.08.2022
9.	WAYS TO CLASSIFY NUMERICAL DATA -RELATED SOLVED EXAMPLES	26.08.2022
10.	EXERCISE PROBLEMS	27.08.2022
11.	TABULAR PRESENTATION OF DATA, ADVANTAGES OF TABULATION, MAIN PARTS OF A STATISTICAL TABLE	29.08.2022
12.	GENERAL RULES OF CONSTRUCTING A TABLE, TYPES OF TABLES -RELATED SOLVED EXAMPLES	30.08.2022
13.	DIAGRAMMATIC REPRESENTATION OF DATA, TYPES OF DIAGRAMS	31.08.2022
14.	RELATED SOLVED EXAMPLES	01.09.2022
15.	GRAPHIC REPRESENTATION OF DATA, TYPES OF GRAPHS	02.09.2022
16.	-RELATED SOLVED EXAMPLES	03.09.2022
17.	SOME NEW TECHNIQUES OF DATA PRESENTATION -RELATED SOLVED EXAMPLES	05.09.2022
18.	EXERCISE PROBLEMS	06.09.2022
	UNIT II	07.09.2022
19.	MEASURES OF CENTRAL TENDENCY -MEANING, PURPOSE, TYPES	
20.	ARITHMETIC MEAN, METHODS OF COMPUTING	08.09.2022

	-RELATED SOLVED EXAMPLES	
21.	COMBINED A.M., CORRECTING THE INCORRECT VALUES OF MEAN, MATHEMATICAL PROPERTIES OF A.M. -RELATED SOLVED EXAMPLES	09.09.2022
22.	MERITS AND DEMERITS OF A.M., WEIGHTED A.M. -RELATED SOLVED EXAMPLES	10.09.2022
23.	EXERCISE PROBLEMS	12.09.2022
24.	MEDIAN & METHODS OF COMPUTING IT, GRAPHICAL LOCATION OF MEDIAN -RELATED SOLVED EXAMPLES	13.09.2022
25.	-RELATED SOLVED EXAMPLES, MERITS & DEMERITS OF MEDIAN	14.09.2022
26.	PARTITION VALUES - QUARTILES, DECILES AND PERCENTILES	15.09.2022
27.	-RELATED SOLVED EXAMPLES	16.09.2022
28.	MODE & METHODS OF COMPUTING IT, GRAPHICAL LOCATION OF THE MODE -RELATED SOLVED EXAMPLES	17.09.2022
29.	-RELATED SOLVED EXAMPLES	19.09.2022
30.	EXERCISE PROBLEMS	20.09.2022
31.	TEST	21.09.2022
32.	GEOMETRIC MEAN, SPECIAL USE, MERITS & DEMERITS -RELATED SOLVED EXAMPLES	22.09.2022
33.	HARMONIC MEAN -RELATED SOLVED EXAMPLES	24.09.2022
34.	RELATIONSHIP BETWEEN A.M, G.M. AND H.M., RELATIONSHIP BETWEEN MEAN, MEDIAN AND MODE -RELATED SOLVED EXAMPLES	27.09.2022
35.	EXERCISE PROBLEMS	28.09.2022
36.	DISPERSION MEANING, OBJECTIVES AND METHODS OF MEASURING	29.09.2022
37.	RANGE, INTERQUARTILE RANGE, QUARTILE DEVIATION, MEAN DEVIATION -RELATED SOLVED EXAMPLES	30.09.2022
38.	STANDARD DEVIATION AND VARIANCE -RELATED SOLVED EXAMPLES	01.10.2022
39.	-RELATED SOLVED EXAMPLES	03.10.2022
40.	EXERCISE PROBLEMS	04.10.2022
41.	MATHEMATICAL PROPERTIES OF S.D., COEFFICIENT OF VARIATION	06.10.2022
42.	-RELATED SOLVED EXAMPLES	07.10.2022
43.	LORENZ CURVE AND MISCELLANEOUS EXAMPLES	08.10.2022
44.	EXERCISE PROBLEMS	10.10.2022
45.	UNIT III SKEWNESS MEANING, TESTS, MEASURES	11.10.2022

46.	KARL PEARSON'S METHOD OF MEASURING SKEWNESS -RELATED SOLVED EXAMPLES	12.10.2022
47.	BOWLEY'S METHOD -RELATED SOLVED EXAMPLES	13.10.2022
48.	KELLY'S METHOD -RELATED SOLVED EXAMPLES	14.10.2022
49.	EXERCISE PROBLEMS	15.10.2022
50.	TEST	17.10.2022
51.	MOMENTS AND THEIR UTILITY -RELATED SOLVED EXAMPLES	18.10.2022
52.	SHEPPARD'S CORRECTION FOR ERRORS IN MOMENTS, MEASURE OF SKEWNESS BASED ON MOMENTS	19.10.2022
53.	KURTOSIS -TYPES, MEASURES, RELATED SOLVED EXAMPLES	20.10.2022
54.	-RELATED SOLVED EXAMPLES	21.10.2022
55.	EXERCISE PROBLEMS	22.10.2022
56.	UNIT IV CORRELATION -DEFINITION, UTILITY, TYPES, DEGREE	26.10.2022
57.	METHODS OF STUDYING CORRELATION, GRAPHIC METHOD -RELATED SOLVED EXAMPLES	27.10.2022
58.	KARL PEARSON'S COEFFICIENT OF CORRELATION -RELATED SOLVED EXAMPLES	28.10.2022
59.	-RELATED SOLVED EXAMPLES	29.10.2022
60.	VARIANCE- COVARIANCE METHOD -RELATED SOLVED EXAMPLES	31.10.2022
61.	ASSUMPTIONS AND PROPERTIES OF KARL PEARSON COEFFICIENT OF CORRELATION	02.11.2022
62.	EXERCISE PROBLEMS	03.11.2022
63.	TEST	04.11.2022
64.	SPEARMEN RANK CORRELATION METHOD -RELATED SOLVED EXAMPLES	05.11.2022
65.	RELATED SOLVED EXAMPLES	07.11.2022
66.	CONCURRENT DEVIATION METHOD -RELATED SOLVED EXAMPLES	09.11.2022
67.	COEFFICIENT OF DETERMINATION -RELATED SOLVED EXAMPLES	10.11.2022
68.	MISCELLANEOUS SOLVED EXAMPLES	11.11.2022
69.	EXERCISE PROBLEMS	12.11.2022
70.	REGRESSION MEANING, UTILITY, TYPES	14.11.2022
71.	SIMPLE LINEAR REGRESSION, REGRESSION LINES, REGRESSION EQUATIONS AND REGRESSION COEFFICIENTS	15.11.2022

72.	RELATED SOLVED EXAMPLES	16.11.2022
73.	RELATED SOLVED EXAMPLES	17.11.2022
74.	GRAPHING REGRESSION LINES -RELATED SOLVED EXAMPLES	18.11.2022
75.	RELATED SOLVED EXAMPLES	19.11.2022
76.	RELATED SOLVED EXAMPLES	21.11.2022
77.	EXERCISE PROBLEMS	22.11.2022
78.	STANDARD ERROR OF ESTIMATE, EXPLAINED AND UNEXPLAINED VARIATION -RELATED SOLVED EXAMPLES	23.11.2022
79.	MISCELLANEOUS SOLVED EXAMPLES	24.11.2022
80.	EXERCISE PROBLEMS	25.11.2022
81.	TEST	26.11.2022
82.	GROUP DISCUSSION/PRESENTATIONS	28.11.2022
83.	GROUP DISCUSSION/PRESENTATIONS	29.11.2022
84.	REVISION	30.11.2022
85.	REVISION	01.12.2022
86.	REVISION	02.12.2022
87.	REVISION	03.12.2022
88.	REVISION	05.12.2022
89.	REVISION	06.12.2022
90.	REVISION	07.12.2022
91.	REVISION	08.12.2022
92.	REVISION	09.12.2022
93.	REVISION	10.12.2022

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)**LESSON PLAN****2022-2023**

Faculty Name: Dr. Poonam Adhlakha

Subject: Calculus

Class/ Semester: B.A. I Sem

Commencement Date: 22 August, 2022

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
1.	Review Chapter Derivative of a function, Differentiation of different functions	22.08.2022		
2.	Ch. 1 Limits, Continuity and Derivability Limits of a function, Right Hand and Left Hand limits	23.08.2022		
3.	Infinite limits and solved examples, Problems of Exercise 1.1	24.08.2022		
4.	Continuous functions, Discontinuous function and solved examples, Problems of Exercise 1.2	25.08.2022		
5.	Derivability at an interior point Solved examples and Problems of Exercise 1.3	26.08.2022		
6.	Ch. 2 Successive Differentiation Introduction and Its Examples	27.08.2022		
7.	Problems of Exercise 2.1, Some standard results for nth derivatives and Solved examples	29.08.2022		
8.	Problems of Exercise 2.2, Typical examples of nth derivatives	30.08.2022		
9.	Solved examples and Problems of Exercise 2.3	31.08.2022		
10.	Lebnitz Theorem and its examples	01.09.2022		
11.	Problems of Exercise 2.4	02.09.2022		
12.	Calculation of nth derivative at $x=0$ and its related examples	03.09.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
13.	Discussion of Notes of Ch 1 and Ch 2 given to students	05.09.2022		
14.	Class Test of Chapter 1	06.09.2022		
15.	Ch. 3 Some General Theorems on Differential functions and expansions Taylor's Theorem and its examples	07.09.2022		
16.	Problems of Exercise 3.1 and Infinite Series	08.09.2022		

17.	Solved Examples	09.09.2022		
18.	Problems of Exercise 3.2	10.09.2022		
19.	Another form of Taylor Series and Its Examples	12.09.2022		
20.	Problems of Exercise 3.3 and Expansion by Differential Equations	13.09.2022		
21.	Solved Examples and Problems of Exercise 3.4	14.09.2022		
22.	Ch. 4 Asymptotes Finite and Infinite Branches of Curve, Horizontal and vertical asymptotes	15.09.2022		
23.	Solved examples and Problems of Exercise 4.1	16.09.2022		
24.	Oblique Asymptotes and Its Examples	17.09.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
25.	Problems of Exercise 4.2, Alternative method of finding Asymptotes of Algebraic Curves	19.09.2022		
26.	Solved examples and Problems of Exercise 4.3	20.09.2022		
27.	Asymptotes of Polar Curves and solved examples	21.09.2022		
28.	Discussion of Notes of Ch 3 and Ch 4 given to students	22.09.2022		
29.	Class Test of Ch 2 and 3	24.09.2022		
30.	Ch. 5 Curvature Introduction, Intrinsic Equation of Curve, Curvature of Circle, Radius of Curvature	27.09.2022		
31.	Radius of Curvature for Polar and Pedal Equations and Its Examples	28.09.2022		
32.	Problems of Exercise 5.2, Radius of Curvature at the origin	29.09.2022		
33.	Newton's Method and Its Examples	30.09.2022		
34.	Problems of Exercise 5.3, Centre and Circle of Curvature, Evolute of the curve	01.10.2022		
35.	Solved examples and Problems of Exercise 5.4	03.10.2022		
36.	Class Test of Chapter 3 and Chapter 4	04.10.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
37.	Ch. 6 Singular Points Introduction, Multiple Points	06.10.2022		
38.	Types of Double Points, Solved examples	07.10.2022		
39.	Problems of Exercise 6.1, Species of cusps	08.10.2022		
40.	Solved examples and Problems of Exercise 6.2	10.10.2022		
41.	Concavity and Convexity, Points of Inflexion	11.10.2022		
42.	Solved Examples and Problems of Exercise 6.3	12.10.2022		
43.	Discussion of Notes of Ch 5 and Ch 6 given to students	13.10.2022		
44.	Ch. 7 Curve Tracing Introduction, Tracing of Cartesian Curves	14.10.2022		
45.	Solved examples and Problems of Exercise 7.1	15.10.2022		
46.	Parametric Equations and Solved examples	17.10.2022		
47.	Problems of Exercise 7.2, Tracing of Polar Curves	18.10.2022		
48.	Solved examples and Problems of Exercise 7.3	19.10.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
49.	Ch. 8 Reduction Formulae Introduction, Reduction Formula of different function ²	20.10.2022		
50.	Solved Examples, Walli's Formula	21.10.2022		
51.	Solved examples and Problems of Exercise 8.2	22.10.2022		
52.	Reduction formula for more complex functions	26.10.2022		
53.	Solved examples and Problems of Exercise 8.3	27.10.2022		
54.	Discussion of Notes of Ch 7 and Ch 8 given to students	28.10.2022		
55.	Solved Examples	29.10.2022		
56.	Class Test of Chapter 6 and Chapter 7	31.10.2022		
57.	Ch. 9 Rectification Introduction, Fundamental Theorem about rectification and Its Examples	02.11.2022		

58.	Problems of Exercise 9.1	03.11.2022		
59.	Length of the Parametric Curves and Its Examples	04.11.2022		
60.	Problems of Exercise 9.2, Length of the Polar Curves and solved examples	05.11.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
61.	Problems of Exercise 9.3	07.11.2022		
62.	Intrinsic Equation of Curve and Its Examples	09.11.2022		
63.	Problems of Exercise 9.4	10.11.2022		
64.	Class Test of Chapter 8	11.11.2022		
65.	Ch. 10 Quadrature Introduction, Definition of Quadrature and Its Examples	12.11.2022		
66.	Problems of Exercise 10.1, Area between two curves	14.11.2022		
67.	Solved examples and Problems of Exercise 10.2	15.11.2022		
68.	Area formula for parametric curves and Its Examples	16.11.2022		
69.	Problems of Exercise 10.3	17.11.2022		
70.	Area formula for Polar Curves and solved examples	18.11.2022		
71.	Problems of Exercise	19.11.2022		
72.	Discussion of Notes of Ch 9 and Ch 10 given to students	21.11.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
73.	Class Test of Chapter 9	22.11.2022		
74.	Ch. 11 Volumes and Surfaces of Solids of Revolution Introduction	23.11.2022		

75.	Volume of solid of revolution and Its Examples	24.11.2022		
76.	Problems of Exercise 11. 1, Any axis of revolution and Its Examples	25.11.2022		
77.	Problems of Exercise 11.2, Volume formulae for two solids	26.11.2022		
78.	Solved examples	28.11.2022		
79.	Problems of Exercise 11.3	29.11.2022		
80.	Volume formula for polar curve and its solved examples	30.11.2022		
81.	Problems of Exercise 11.4	01.12.2022		
82.	Area of Surface of Revolution and its examples	02.12.2022		
83.	Problems of Exercise 11.5	03.12.2022		
84.	Centroid of a Plane Region, Theorem of Pappus and Guldin	05.12.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
85.	Solved Examples and Problems of Exercise 11.6	06.12.2022		
86.	Discussion of Notes of Ch 11 given to students	07.12.2022		
87.	Discussion of short answer type questions	08.12.2022		
88.	Board Presentation of Unit 1 and 2	09.12.2022		
89.	Discussion of Problems of whole syllabus	10.12.2022		
90.	Discussion of Problems of whole syllabus	12.12.2022		
91.	Board Presentation of Unit 3 and 4	13.12.2022		
92.	Class Test	14.12.2022		

Signature of Faculty

Reviewed by

Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/ Recommendation)

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)**LESSON PLAN****2022-2023**

Faculty Name: Dr. Poonam Adhlakha

Subject: Statics

Class/ Semester: B.A. / B. Sc. III Sem

Commencement Date: 16 August, 2022

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
1.	Preliminaries Mechanics and Its branches, Some definition related to static, representation of a force by a straight line.	16.08.2022		
2.	Principle of transmissibility of forces, classification of forces. Tension and thrust, tension in an elastic string.	17.08.2022		
3.	Ch:1 Forces acting at a point Resultant and component, Parallelogram law of forces.	18.08.2022		
4.	Magnitude and direction of the resultant, maximum and minimum resultant and Solved Examples	20.08.2022		
5.	Problems of Exercise 1.1, Resolution of a given force in two given directions.	22.08.2022		
6.	Components of given force in two given directions, resolved parts of a given force.	23.08.2022		
7.	Solved Examples	24.08.2022		
8.	Problems of Exercise 1.2, Triangle law of forces.	25.08.2022		
9.	Solved examples.	26.08.2022		
10.	Problems of Exercise 1.3.	27.08.2022		
11.	Lami's Theorem, solved examples.	29.08.2022		
12.	Problems of Exercise 1.4.	30.08.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
13.	Polygon law of forces, Theorem of resolved parts.	31.08.2022		
14.	Generalization of theorem of resolved parts	01.09.2022		

15.	Solved Examples.	02.09.2022		
16.	Problems of Exercise 1.5.	03.09.2022		
17.	Condition of equilibrium of concurrent forces.	05.09.2022		
18.	Solved Examples and Problems of Exercise 1.6.	06.09.2022		
19.	Equilibrium of bodies placed on a Smooth inclined plane.	07.09.2022		
20.	Discussion of Notes of Ch 1 given to students	08.09.2022		
21.	Ch: 2 Parallel forces. Introduction, like and unlike parallel forces, Centre of the parallel forces. Theorem of resolved parts for parallel forces.	09.09.2022		
22.	Generalised theorem of resolved parts, solved examples.	10.09.2022		
23.	Solved Examples of parallel forces.	12.09.2022		
24.	Problems of Exercise 2.1.	13.09.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
25.	Class Test of Ch. 1.	14.09.2022		
26.	Ch: 3 Moments Moment of a force about a point, geometrical representation of moment.	15.09.2022		
27.	Independence Day	16.09.2022		
28.	Solved Examples.	17.09.2022		
29.	Problems of Exercise 3.1. Varignon's Theorem, Resultant of a system of coplanar forces acting on a rigid body.	19.09.2022		
30.	Solved Examples	20.09.2022		
31.	Problems of Exercise 3.2	21.09.2022		
32.	Centre of a number of parallel forces.	22.09.2022		
33.	Moment of a force about a line	24.09.2022		
34.	Varignon's Theorem on moments about a line	27.09.2022		
35.	Solved Examples	28.09.2022		
36.	Discussion of Notes of Ch 2 and Ch 3 given to students	29.09.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
37.	Ch: 4 Couples Introduction, moment of a couple, Equilibrium of two couples.	30.09.2022		
38.	Resultant of coplanar couples, generalization of the theorem.	01.10.2022		
39.	Solved Examples.	03.10.2022		
40.	Problems of Exercise 4.1, Resultant of a force and couple.	04.10.2022		
41.	Solved Examples.	06.10.2022		
42.	Problems of Exercise 4.2.	07.10.2022		
43.	Ch: 5 Analytical conditions of Equilibrium of coplanar forces, Trigonometrical theorem.	08.10.2022		
44.	Solved Examples.	10.10.2022		
45.	Problems of Exercise 5.1, Conditions of Equilibrium of any number of coplanar forces.	11.10.2022		
46.	Solved Examples.	12.10.2022		
47.	Problems of Exercise 5.2.	13.10.2022		
48.	Class Test of Ch. 2 and Ch. 3.	14.10.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
49.	Ch: 6 Friction Introduction, stages and kinds of friction, laws of static friction.	15.10.2022		
50.	Angle of friction, cone of friction and its theorems.	17.10.2022		
51.	Solved Examples.	18.10.2022		
52.	Problems of Exercise 6.1.	19.10.2022		
53.	Problems of Equilibrium of rods and ladders.	20.10.2022		
54.	Solved Examples.	21.10.2022		
55.	Discussion of Notes of Ch 5 and Ch 6 given to students	22.10.2022		
56.	Class Test of Ch. 4 and Ch. 5.	26.10.2022		
57.	Ch. 7 Centre of Gravity. Centre of Gravity of a uniform rod, this uniform lamina, Quadrilateral laminate.	27.10.2022		

58.	Solved Examples.	28.10.2022		
59.	Problems of Exercise 7.1.	29.10.2022		
60.	Centre of Gravity of a Body by integration, Centre of Gravity of uniform rod, uniform tetrahedron.	31.10.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
61.	Centre of Gravity of uniform circular wire, right circular cone	02.11.2022		
62.	Solved Examples.	03.11.2022		
63.	Problems of Exercise 7.2.	04.11.2022		
64.	Ch: 8 virtual work Work, Measurement of work, Principle of virtual work.	05.11.2022		
65.	Vector and Cartesian method for principle of virtual work.	07.11.2022		
66.	Important Results, Tension and Thrust of inextensible rod.	09.11.2022		
67.	Solved Examples and Problems of Exercise 8.1	10.11.2022		
68.	Discussion of Notes of Ch 7 and Ch 8 given to students	11.11.2022		
69.	Ch: 9 forces in three dimensions. Parallelogram Law of forces Axis of a couple, composition of couple.	12.11.2022		
70.	Axis of a couple, composition of couple.	14.11.2022		
71.	Invariants, Equation of central axis.	15.11.2022		
72.	Related Solved Examples	16.11.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
73.	Problems of Exercise 9.1	17.11.2022		
74.	Class Test of Ch. 7.	18.11.2022		
75.	Ch: 10 Wrenches. Introduction	19.11.2022		
76.	Resultant wrench of two given wrenches.	21.11.2022		
77.	Theorems of wrenches.	22.11.2022		
78.	Solved Examples.	23.11.2022		
79.	Discussion of Notes of Ch 9 and Ch 10 given to students	24.11.2022		
80.	Class Test of Ch. 8	25.11.2022		
81.	Ch: 11 Null lines and Null planes. Null lines and Null planes, Theorem of equation of conjugate lines.	26.11.2022		
82.	Solved Examples.	28.11.2022		
83.	Problems of Exercise of Ch 11	29.11.2022		
84.	Class Test of Ch. 9.	30.11.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
85.	Ch: 12 Stable, unstable and neutral equilibrium. Introduction, Equilibrium of Bodies, Position of Equilibrium.	01.12.2022		
86.	Conditions of stability of Equilibrium, Body resting inside other fixed concave body.	02.12.2022		
87.	Solved Examples	03.12.2022		
88.	Problems of Exercise of Ch 12	05.12.2022		
89.	Discussion of Notes of Ch 11 and Ch 12 given to students	06.12.2022		
90.	Discussion of Problems of whole syllabus	07.12.2022		
91.	Board Presentation of Unit 1 and 2	08.12.2022		
92.	Board Presentation of Unit 3 and 4	09.12.2022		

Signature of Faculty

Reviewed by

Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/ Recommendation)

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

LESSON PLAN

2022-2023

Faculty Name: Dr. Poonam Adhlakha

Subject: Real Analysis

Class/ Semester: BA/ BSc V Sem

Commencement Date: 16 August, 2022

S.No.	Topic	Proposed Date	Actual Date	Remarks
1	Partition, Norm of a Partition	16.08.2022		
2	Refinement of a Partition, Upper and Lower sums, Oscillatory sum	17.08.2022		
3	Theorems, Riemann Integral	18.08.2022		
4	Riemann Integral cont	20.08.2022		
5	Theorems	22.08.2022		
6	Darboux's theorem, Condition of Integrability	23.08.2022		
7	Integrability of continuous functions	24.08.2022		
8	Integrability of monotonic functions, Integral as a limit of sums	25.08.2022		
9	Riemann sum, Second definition of integrability	26.08.2022		
10	Properties of Riemann integral, First Mean Value theorem	27.08.2022		
11	Theorems on continuity and Differentiability of integral function	29.08.2022		
12	Primitive of a function, Fundamental theorem of integral calculus	30.08.2022		

Reviewed by

Date

Remarks

S.No.	Topic	Proposed Date	Actual Date	Remarks
13	Generalised Mean value theorem, Second Mean Value theorem	31.08.2022		
14	Discussion of Notes of Ch 1 given to students	01.09.2022		
15	Test	02.09.2022		
16	Improper Integral, Types of Improper integrals	03.09.2022		

17	Convergence of Improper integrals	05.09.2022		
18	Comparison Tests	06.09.2022		
19	Comparison Tests cont.	07.09.2022		
20	Test for convergence of the integral of a Product of two functions	08.09.2022		
21	Test for convergence of the integral of a Product of two functions cont.	09.09.2022		
22	Frullani's integral	10.09.2022		
23	Revision and Doubt class	12.09.2022		
24	Integral as a function of a parameter	13.09.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
25	Integral as a function of a parameter cont.	14.09.2022		
26	Discussion of Notes of Ch 2 and Ch 3 given to students	15.09.2022		
27	Metric and Metric space	16.09.2022		
28	Some examples of Metric spaces	17.09.2022		
29	Some examples of Metric spaces cont.	19.09.2022		
30	Bounded sequence, Induced Metric	20.09.2022		
31	Semi-Metric space, Distance between point and subset	21.09.2022		
32	Diameter of a subset, Distance between two subsets	22.09.2022		
33	Bounded and unbounded Metric spaces	24.09.2022		
34	Revision and Doubt class	27.09.2022		
35	Discussion of Notes of Ch 4 given to students	28.09.2022		
36	Open sphere, Closed sphere	29.09.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
37	Interior point and neighborhood of a point	30.09.2022		
38	Interior of a set	01.10.2022		
39	Open set, Theorems related to open sets	03.10.2022		
40	Adherent point, Limit point, Isolated point	04.10.2022		
41	Derived set, Closure of a set, Closed set	06.10.2022		
42	Theorems	07.10.2022		
43	Exterior points and exterior of a set	08.10.2022		
44	Frontier points and Frontier of a set	10.10.2022		
45	Boundary points and Boundary of a set	11.10.2022		
46	Equivalent Metrics	12.10.2022		
47	Revision and Doubt class	13.10.2022		
48	Assignment	14.10.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
49	Sequences in Metric Spaces	15.10.2022		
50	Sequences in Metric Spaces cont.	17.10.2022		
51	Convergence in a Metric Space	18.10.2022		
52	Theorems	19.10.2022		
53	Theorems cont.	20.10.2022		
54	Cauchy Sequence	21.10.2022		
55	Complete Metric Space	22.10.2022		
56	Subsequence	26.10.2022		
57	Theorems	27.10.2022		
58	Completeness of \mathbb{R} .	28.10.2022		
59	Cantor's Intersection theorem	29.10.2022		
60	Nowhere dense set	31.10.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
61	First Category Space	02.11.2022		
62	Second Category Space, Baire's Category theorem	03.11.2022		
63	Contraction Principle in a Metric Space, Fixed point	04.11.2022		
64	Discussion of Notes of Ch 5 and Ch 6 given to students	05.11.2022		
65	Revision and Doubt class	07.11.2022		
66	Continuous function	09.11.2022		
67	Theorems on Continuous function	10.11.2022		
68	Theorems on Continuous function cont.	11.11.2022		
69	Theorems on Continuous function cont.	12.11.2022		
70	Uniform Continuity	14.11.2022		
71	Theorems, Isometry	15.11.2022		
72	Theorems, Isometry cont.	16.11.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
73	Covers, Compact set and Compact Metric Space	17.11.2022		
74	Bolzano Weierstrass Property (BWP)	18.11.2022		
75	Sequentially Compact Metric Space	19.11.2022		
76	Countably Compact Spaces, Finite Intersection Property (FIP)	21.11.2022		
77	Net and Total Boundedness, Continuity and Compactness, Theorems	22.11.2022		
78	Discussion of Notes of Ch 7 and Ch 8 given to students	23.11.2022		
79	Connectedness in Metric Spaces, Connected and Disconnected sets	24.11.2022		
80	Properties of Separated sets	25.11.2022		
81	Theorems	26.11.2022		
82	Component, Continuity and Connectedness	28.11.2022		

83	Totally Disconnected Spaces, Locally Connected Spaces	29.11.2022		
84	Discussion of Notes of Ch 9 given to students	30.11.2022		

Reviewed by**Date****Remarks**

S.No.	Topic	Proposed Date	Actual Date	Remarks
85	Discussion of Short Questions	01.12.2022		
86	Revision and Problems	02.12.2022		
87	Board Presentations	03.12.2022		
88	Board Presentations	05.12.2022		
89	Board Presentations	06.12.2022		
90	Class Test	07.12.2022		
91	Revision and Doubt class	08.12.2022		
92	Revision and Doubt class	09.12.2022		

Signature of Faculty**Reviewed by****Date****Remarks****Overall observation (Problem faced/Improvement Suggestion/Recommendation)****Reviewed by H.O.D./Committee****Principal**

SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)**LESSON PLAN****2022-2023**

Faculty Name: Dr. Poonam Adhlakha

Subject: Business Mathematics

Class/ Semester: B. Com I Sem

Commencement Date: 22 August, 2022

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
1.	Theory of Sets: Definition and Notation of sets	22.08.2022		
2.	Representation of sets	23.08.2022		
3.	Types of Sets	24.08.2022		
4.	Related results & solved examples	25.08.2022		
5.	Subsets, Power Set and related theorems	26.08.2022		
6.	Related results & solved examples	27.08.2022		
7.	Venn diagrams	29.08.2022		
8.	Operations on sets: Union, Intersection, Symmetric Difference	30.08.2022		
9.	De morgan's laws	31.08.2022		
10.	Related results & solved examples	01.09.2022		
11.	Practical Applications of Sets	02.09.2022		
12.	Exercise problems	03.09.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
13.	Ordered Pairs, Graph of $A \times B$	05.09.2022		
14.	Related results & solved examples	06.09.2022		
15.	Indices: Introduction, Laws of Indices	07.09.2022		
16.	Related results & solved examples	08.09.2022		
17.	Related results & solved examples	09.09.2022		
18.	Exercise problems	10.09.2022		
19.	Exercise problems	12.09.2022		
20.	Discussion of Short Answer Type questions	13.09.2022		

21.	Class Test of Ch 1	14.09.2022		
22.	Logarithms: introduction, some important deductions	15.09.2022		
23.	Related results & solved examples	16.09.2022		
24.	Exercise problems	17.09.2022		

Reviewed by _____ Date _____ Remarks _____

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
25.	Board Presentations Ch 2	19.09.2022		
26.	Discussion of Notes of Ch 1, 2, 3 given to students	20.09.2022		
27.	Power Formula, Base changing Formula	21.09.2022		
28.	Related results & solved examples	22.09.2022		
29.	Exercise problems	24.09.2022		
30.	Two Systems of Logarithms: Natural Logarithms and Common Logarithms	27.09.2022		
31.	Characteristic and Mantissa	28.09.2022		
32.	Related results & solved examples	29.09.2022		
33.	Exercise problems	30.09.2022		
34.	Tables of Logarithms	01.10.2022		
35.	Related solved examples	03.10.2022		
36.	Exercise problems	04.10.2022		

Reviewed by _____ Date _____ Remarks _____

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
37.	Permutations and Combinations: Introduction, Factorial Notation	06.10.2022		
38.	Related solved examples	07.10.2022		
39.	Fundamental Principle of Counting	08.10.2022		
40.	Restricted Permutations	10.10.2022		

41.	Related solved examples	11.10.2022		
42.	Exercise problems	12.10.2022		
43.	Permutations with repetitions	13.10.2022		
44.	Related solved examples	14.10.2022		
45.	Exercise problems	15.10.2022		
46.	Circular Permutations	17.10.2022		
47.	Related solved examples	18.10.2022		
48.	Exercise problems	19.10.2022		

Reviewed by _____ Date _____ Remarks _____

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
49.	Some Theorems on Combinations	20.10.2022		
50.	Related solved examples	21.10.2022		
51.	Exercise problems	22.10.2022		
52.	Practical Problems on Combinations	26.10.2022		
53.	Related solved examples	27.10.2022		
54.	Exercise problems	28.10.2022		
55.	Sequence and Series: Arithmetic Progression	29.10.2022		
56.	Related solved examples	31.10.2022		
57.	Exercise problems	02.11.2022		
58.	Representation of terms in A.P.	03.11.2022		
59.	Related solved examples	04.11.2022		
60.	Exercise problems	05.11.2022		

Reviewed by _____ Date _____ Remarks _____

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
61.	Class Test of Indices and Logarithms	07.11.2022		
62.	Discussion of Notes of Ch 5 given to students	09.11.2022		

63.	Sum of n terms of an A.P.	10.11.2022		
64.	Arithmetic Mean	11.11.2022		
65.	Related solved examples	12.11.2022		
66.	Exercise problems	14.11.2022		
67.	Geometric Mean: General term and sum of n terms of G.P.	15.11.2022		
68.	Related solved examples	16.11.2022		
69.	Exercise problems	17.11.2022		
70.	Geometric Mean	18.11.2022		
71.	Practical Problems on A.P. and G.P.	19.11.2022		
72.	Exercise problems	21.11.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
73.	Data Interpretation: Primary and Secondary Data	22.11.2022		
74.	Classification of Data	23.11.2022		
75.	Essentials of an ideal classification	24.11.2022		
76.	Different Ways of classification of Data	25.11.2022		
77.	Discrete Grouped Frequency Distribution	26.11.2022		
78.	Continuous Grouped Frequency Distribution	28.11.2022		
79.	Related solved examples	29.11.2022		
80.	Approaches to Data Interpretation	30.11.2022		
81.	Tabulation method	01.12.2022		
82.	Parts of Statistical Table	02.12.2022		
83.	Related solved examples	03.12.2022		
84.	Exercise problems	05.12.2022		

Reviewed by

Date

Remarks

S. No.	TOPIC	Proposed Date	Actual Date	Remarks
85.	Graphical Presentation of Statistical Data	06.12.2022		
86.	Related solved examples	07.12.2022		
87.	Exercise problems	08.12.2022		
88.	Board Presentation of Unit 3	09.12.2022		
89.	Discussion of Notes of Ch 6 given to students	10.12.2022		
90.	Discussion of Short Answer type questions	12.12.2022		
91.	Class Test of Ch 5 and Ch 6	13.12.2022		
92.	Board Presentation of Unit 4	14.12.2022		

Signature of Faculty Reviewed by Date Remarks

Overall observation (Problem faced/Improvement Suggestion/ Recommendation)

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (KALANAUR)

LESSON PLAN

Faculty Name: Dr. Satish Narwal
Class/Semester: BA/B.Sc-I/1th Sem.
Commencement Date: 22-08-2022

Subject: Mathematics (Solid Geometry)
Session: 2022-2023
Semester End Date: 17-12-2022

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
1	Basics of Geometry	22-08-2022		
2	Chapter 1 General equation of Second degree Conic Sections, Classification of Conic section	23-08-2022		
3	Centre of a conic section, To find the equation of conic when centre is at the origin, To find the asymptotes of the conic	24-08-2022		
4	To find the lengths and equation of the axes of a central conic	25-08-2022		
5	The parabola in General	26-08-2022		
6	General conic, To find the equation of tangent at any point on the conic, To find the equation of normal at any point on the conic	27-08-2022		
7	Intersection of General conic and the line, To find the condition that the line may touch the conic, chord of contact, To find the equation of Director circle. Axes of the conic	29-08-2022		
8	Revision and Doubt Class	30-08-2022		
9	Chapter 2 Tracing of Conics Introduction, Tracing of conic	31-08-2022		
10	Revision and Doubt Class	01-09-2022		
11	Chapter 3 System of Conics Conic through five points, Conic through the Intersection of two given conics, Intersection of two conics	02-09-2022		
12	To find the equation of a Conic which passes through the intersection of a Conic and Two given straight lines, To find the equation of a Conic having Double contact with a Conic	03-09-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
13	Revision and Doubt Class	05-09-2022		
14	Chapter 4 Confocal Conics Confocal Conics, To find the equation of the Conics which are Confocal with Ellipse, Confocal Conics through a given point	06-09-2022		
15	Co-ordinates of a point in terms of the parameter of the Confocal through it, Confocal Parabolas, Some Theorems on Confocal Conics	07-09-2022		
16	Revision and Doubt Class	08-09-2022		
17	Chapter 5 Polar equation of a Conic Polar Co-Ordinates Equation of a line in Polar Co-Ordinates, Angle between Two lines, Polar Equation of a Circle, Polar Equation of a Conic	09-09-2022		
18	Polar Equation of a Conic with Focus as Pole, Equation of chord joining Two Points, Equation of Tangent on the Conic, Equation of Normal to the Conic	10-09-2022		
19	To prove that the tangents at the extremities of any focal chord of a Conic intersect on the corresponding directrix, Asymptotes of Polar equation of Conic, Director Circle, Tracing of a Conic	12-09-2022		
20	Revision and Doubt Class	13-09-2022		
21	Chapter 6 Sphere Equation of the sphere (standard form), Central form of the equation of the sphere	14-09-2022		
22	Diameter form of the equation of sphere, Radius and Centre of the sphere	15-09-2022		
23	Four point form	16-09-2022		
24	Plane section of a sphere, Equations of Circle	17-09-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
25	Any sphere through a given Circle, Intersection of two spheres	19-09-2022		
26	Intersection of a straight line and a sphere, Power of a point with respect to a Sphere	20-09-2022		

27	Revision and Doubt Class	21-09-2022		
28	Tangent plane, Equation of the tangent plane, Condition of tangency, Condition of tangent of a line and a sphere	22-09-2022		
29	Test-I	24-09-2022		
30	Plane of Contact, Diametral plane, Polar plane, Pole, Equation of the Polar plane, Pole of a given plane	27-09-2022		
31	Reciprocal property of the pole, Reciprocal property of the polar lines, Equation of the polar of a line	28-09-2022		
32	Two or more spheres, Angle of intersection of two spheres, Orthogonal spheres. Condition of Orthogonality	29-09-2022		
33	Radical Plane of Two Spheres, Properties of Radical Plane, Equation of Two Spheres in Simplified form	30-09-2022		
34	Co-Axal System of Spheres, Theorems, Equations of Co-Axal System of Spheres (Simplified form), Limiting points of a Co-Axal System, System of Spheres, Co-Axal with Two given Spheres	01-10-2022		
35	Revision and Doubt Class	03-10-2022		
36	Chapter 7 Cone Definition, Homogeneous equation, Equation of the Cone with vertex at the origin, Equation of a Cone	04-10-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
37	Equation of a Cone with a given vertex and base a given conic	06-10-2022		
38	Right Circular Cone, Equation of the Right Circular Cone (Standard form)	07-10-2022		
39	Quadric Cone through the axes	08-10-2022		
40	Enveloping Cone or tangent Cone, Equation of Enveloping Cone (Standard form)	10-10-2022		
41	Revision and Doubt Class	11-10-2022		
42	Enveloping Cone in the General form, Cone represented by the general Equation of second degree	12-10-2022		
43	Intersection of a straight line and a Cone, Equation of the tangent plane, Reciprocal	13-10-2022		

	Cone, Equation of the Reciprocal Cone			
44	Angle between two lines in which a plane through the vertex of a Cone cuts a Cone	14-10-2022		
45	Condition that Cone may have three mutually perpendicular Generators	15-10-2022		
46	Revision and Doubt Class	17-10-2022		
47	Chapter 8 Cylinder Cylinder, Quadric Cylinder, Equation of the Cylinder whose generators are parallel to a given line Base is a given conic	18-10-2022		
48	Right circular Cylinder, Equation of Right circular Cylinder (Standard form), Equation of Right circular Cylinder (General form)	19-10-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
49	Enveloping Cylinder, Equation of Enveloping Cylinder of a Sphere (Standard form), Cylinder as the limiting Case of a Cone	20-10-2022		
50	Revision and Doubt Class	21-10-2022		
51	Test-II	22-10-2022		
52	Chapter 9 The Conicoid General Equation of second degree, The Conicoid, Central Conicoid, Ellipsoid of Revolution	26-10-2022		
53	Intersection of a line and a Central Conicoid, Tangent plane, Equation of tangent plane. Condition of tangency	27-10-2022		
54	Director sphere, Equation of Normal	28-10-2022		
55	Number of Normals, Cubic curve through the feet of Normals	29-10-2022		
56	Quadric Cone through six concurrent Normals	31-10-2022		
57	Polar plane of a point, Reciprocal property, pole of a given plane	02-11-2022		
58	Condition for two planes to be conjugate, polar lines, polar of a line w.r.t. a Conicoid, Conjugate lines	03-11-2022		
59	Revision and Doubt Class	04-11-2022		
60	Enveloping Cone (tangent Cone), Enveloping Cylinder	05-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
61	Plane section with a given center	07-11-2022		
62	Diametral plane property, Paraboloid	09-11-2022		
63	Intersection of a line and a paraboloid	10-11-2022		
64	To deduce the equation of the enveloping Cone from the condition of tangency of the line and the paraboloid	11-11-2022		
65	Normals to an elliptic paraboloid, Number of Normals	12-11-2022		
66	Cubic curve through the feet of the Normals from a point, Diametral plane	14-11-2022		
67	Revision and Doubt Class	15-11-2022		
68	Chapter 10 Plane Sections of Conicoid Plane sections of conicoid: To determine the nature of the section of the central conicoid	16-11-2022		
69	Lengths and Direction ratios of the axes of a central section of a conicoid, Area of the central section	17-11-2022		
70	Axes of non - central plane section, Area of Plane section	18-11-2022		
71	Circular sections, The Circular sections of an Ellipsoid, To prove that any two Circular sections of an ellipsoid which are not parallel, lie on a sphere	19-11-2022		
72	Plane sections of The Paraboloids: To determine the nature of a plane section of a paraboloid	21-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
73	Axes of plane sections of paraboloids, Area of the section.	22-11-2022		
74	Revision and Doubt Class	23-11-2022		
75	Chapter 11 Generating lines Ruled Surfaces, Generating lines of a	24-11-2022		

	Hyperboloid of one sheet, Some properties of Generating lines of a Hyperboloid of one sheet			
76	Generating lines of a Hyperbolic Paraboloid, Properties of Generating lines of Hyperbolic Paraboloid	25-11-2022		
77	Revision and Doubt Class	26-11-2022		
78	Chapter 12 Confocal Conicoids Confocal Conicoids, Three Confocals through a point, Confocal touching a given plane, Confocal touching a given line, Confocal cut at right angles. Elliptic co-ordinates	28-11-2022		
79	Parameters of confocals through a point on a conicoid, Locus of Poles of planes with respect to confocals, Normal to the three confocals through a point, Axes of Enveloping cone, Equation of enveloping cone. Corresponding points	29-11-2022		
80	Revision and Doubt Class	30-11-2022		
81	Assignment	01-12-2022		
82	Chapter 13 Reduction of Second degree equations Introduction, Intersection of a line and Conicoid, Diametral Plane, The Principal Planes, Reduction of a general equation to the standard form and to discuss the nature of the Conicoid	02-12-2022		
83	One Root of the Discriminating Cubic is zero, When one Root of Discriminating Cubic is zero, Other Two Roots different	03-12-2022		
84	When Two Roots of the Discriminating Cubic are equal and Third Root not zero, When Two Roots of the Discriminating Cubic are equal and Third Root is zero	05-12-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
85	When the Second Degree terms in the equation form a Perfect square	06-12-2022		
86	Revision and Doubt Class	07-12-2022		
87	Revision and Doubt Class	08-12-2022		
88	Revision and Doubt Class	09-12-2022		

89	Revision and Doubt Class	10-12-2022		
90	Revision and Doubt Class	12-12-2022		
91	Revision and Doubt Class	13-12-2022		
92	Revision and Doubt Class	14-12-2022		
93	Revision and Doubt Class	15-12-2022		
94	Revision and Doubt Class	16-12-2022		
95	Revision and Doubt Class	17-12-2022		

Signature of Faculty

Reviewed by

Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/Recommendation):-

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (KALANAUR)

LESSON PLAN

Faculty Name: Dr. Satish Narwal
Class/Semester: BA/B.Sc-II/3th Sem.
Commencement Date: 16-08-2022

Subject: Mathematics (Advanced Calculus)
Session: 2022-2023
Semester End Date: 09-12-2022

S.No./Lect. No.	Topic	Proposed Date	Actual Date	Remarks
1	Preliminaries	16-08-2022		
2	Chapter 1 Continuous Function Continuous Function, Discontinuous Function	17-08-2022		
3	Theorems	18-08-2022		
4	Algebra of Continuous Functions	20-08-2022		
5	Boundedness of Continuous Functions	22-08-2022		
6	Theorems	23-08-2022		
7	Theorems cont.	24-08-2022		
8	Open set and Closed set	25-08-2022		
9	Some Theorems on open and closed sets	26-08-2022		
10	Some Theorems on open and closed sets cont.	27-08-2022		
11	Intermediate value theorem	29-08-2022		
12	Uniform Continuity	30-08-2022		

Reviewed by

Date

Remarks

S.No./Lect. No.	Topic	Proposed Date	Actual Date	Remarks
13	Examples related to uniform continuity	31-08-2022		
14	Revision and Doubt class	01-09-2022		
15	Chapter 2 The Derivative and Mean Value Theorems Introduction, Sign of the derivative, Darboux's theorem	02-09-2022		
16	Roll's theorem, Geometrical interpretation of Roll's theorem	03-09-2022		
17	Examples related to Roll's theorem	05-09-2022		
18	Lagrange's Mean value theorem, Geometrical interpretation of	06-09-2022		

	Lagrange's Mean value theorem			
19	Examples related to Lagrange's Mean value theorem	07-09-2022		
20	Cauchy's Mean value theorem	08-09-2022		
21	Taylor's theorem, Taylor's theorem with various form of remainder	09-09-2022		
22	Taylor's theorem, Taylor's theorem with various form of remainder cont.	10-09-2022		
23	Revision and Doubt class	12-09-2022		
24	Chapter 3 Indeterminate Forms Introduction, L'Hospital's Rule for evaluation of indeterminate form	13-09-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
25	L'Hospital's Rule for evaluation of indeterminate form cont.	14-09-2022		
26	Evaluation of the limits by the method of known series	15-09-2022		
27	L'Hospital's Rule for evaluate the another indeterminate form	16-09-2022		
28	Evaluation of indeterminate form	17-09-2022		
29	Revision and Doubt class	19-09-2022		
30	Test-I	20-09-2022		
31	Chapter 4 Limit and Continuity of Functions of Two variables Limit and continuity of functions of two variables	21-09-2022		
32	Cartesian product of two or more sets, functions of two variable, Square and circular neighbourhood of a point	22-09-2022		
33	Limit of a function of two variables, Algebra of limit	24-09-2022		
34	Examples related to limits of two variables	27-09-2022		
35	Continuity of a function of two variables, Algebra of continuous functions	28-09-2022		
36	Examples related to continuity of two variables	29-09-2022		

Reviewed by _____ Date _____ Remarks _____

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
37	Revision and Doubt class	30-09-2022		
38	Test-II	01-10-2022		
39	Chapter 5 Partial Differentiation Partial Differentiation, Rules of Partial Differentiation	03-10-2022		
40	Partial Differentiation of Higher order	04-10-2022		
41	Homogeneous function	06-10-2022		
42	Euler's theorem on Homogenous functions	07-10-2022		
43	Relation between second order derivatives of Homogeneous functions	08-10-2022		
44	Total increment and total differential, Successive total differentials	10-10-2022		
45	Composite functions, Change of variables	11-10-2022		
46	Differentiation of Implicit functions	12-10-2022		
47	Differentiation of Implicit functions cont.	13-10-2022		
48	Taylor's theorem for functions of two variables	14-10-2022		

Reviewed by _____ Date _____ Remarks _____

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
49	Taylor's theorem for functions of two variables cont.	15-10-2022		
50	Revision and Doubt class	17-10-2022		
51	Chapter 6 Differentiability of Functions of Two Variables Introduction, Functions of two variables, Differentiability. Theorems	18-10-2022		
52	Examples related to differentiable functions of two variables	19-10-2022		
53	Examples related to differentiable functions of two variables cont.	20-10-2022		
54	Examples related to differentiable functions of two variables cont.	21-10-2022		
55	A sufficient condition for differentiability	22-10-2022		

56	Young's theorem	26-10-2022		
57	Schwarz's theorem	27-10-2022		
58	Implicit function theorem	28-10-2022		
59	Revision and Doubt class	29-10-2022		
60	Assignment	31-10-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
61	Chapter 7 Maximum and Minimum of a Function of Two Variables Maximum and Minimum of a function of two variables	02-11-2022		
62	Theorems	03-11-2022		
63	Examples related to Maximum and Minimum of a function of two variables	04-11-2022		
64	Examples related to Maximum and Minimum of a function of two variables cont.	05-11-2022		
65	Revision and Doubt class	07-11-2022		
66	Chapter 8 Curves in Space Meaning of differential geometry, Description of curves in space	09-11-2022		
67	Tangent to a curve, unit vector along the tangent to a given curve	10-11-2022		
68	Formula for length of arc of a curve	11-11-2022		
69	Equation of a tangent line at a point on a space curve, Cartesian form of equation of tangent line	12-11-2022		
70	Osculating plane (or) plane of curvature, Alternative definition of osculating plane, Analytic function	14-11-2022		
71	Order of contact between curve and surfaces, inflexional tangent	15-11-2022		
72	Equation of tangent plane at any point of the surface, To show that Normal plane is perpendicular to the osculating plane	16-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
73	Two special Normals, Fundamental unit vectors and Fundamental planes, Directions of Principal Normal and Binormal, Curvature	17-11-2022		
74	Torsion, Expression for Torsion to the curve at the given point, Screw curvature, Serret- Frenet formula, Some important theorems	18-11-2022		
75	Revision and Doubt class	19-11-2022		
76	Chapter 9 Circle of Curvature and Spherical Curvature Osculating circle or circle of curvature, Radius and centre of circle of curvature, Cartesian approach, Properties of the locus of the centre of curvature	21-11-2022		
77	Osculating sphere (or) The sphere of curvature, To find the radius and centre of spherical curvature, Properties of locus of centre of spherical curvature	22-11-2022		
78	Revision and Doubt class	23-11-2022		
79	Chapter 10 Involutives and Evolutes Introduction, Involutives, Curvature and Torsion of the involute	24-11-2022		
80	Evolutes, Curvature and torsion of the Evolute, Bertrand curves, Properties of Bertrand curves	25-11-2022		
81	Revision and Doubt class	26-11-2022		
82	Chapter 11 Concept of a Surface and Envelopes Definition of a surface, Implicit representation of a surface, Parametric equations of a surface are not unique, Class of a surface	28-11-2022		
83	Singularity of a surface, Transformation of parameter, Geometrical significance of proper transformation	29-11-2022		
84	Curvilinear equations of the curve on the surface, Parametric curves, Tangent plane and Normal	30-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
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85	Cartesian form of the equation of the tangent plane, Normal line, Cartesian equation of the normal	01-12-2022		
86	Family of surfaces, Characteristic curve of family of surfaces, Envelope, Edge of Regression, Equation of Edge of Regression of the envelope	02-12-2022		
87	Revision and Doubt class	03-12-2022		
88	Revision and Doubt class	05-12-2022		
89	Revision and Doubt class	06-12-2022		
90	Revision and Doubt class	07-12-2022		
91	Revision and Doubt class	08-12-2022		
92	Revision and Doubt class	09-12-2022		

Signature of Faculty

Reviewed by

Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/Recommendation):-

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (KALANAUR)

LESSON PLAN

Faculty Name: Dr. Satish Narwal
Class/Semester: BA/B.Sc-III/5th Sem.
Commencement Date: 16-08-2022

Subject: Mathematics (Numerical Analysis)
Session: 2022-2023
Semester End Date: 19-12-2022

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
1	Chapter 1 Finite difference operator Introduction, Some Definitions, Forward Differences, Diagonal Forward Difference Table	16-08-2022		
2	Backward Differences, Fundamental Theorem of Difference, Properties of operator	17-08-2022		
3	Difference of Some functions, Examples related to forward difference operator and backward difference operator.	18-08-2022		
4	Properties of operator E, Relations between operators, To Express any Value of the function in terms of Leading terms and Leading Differences	20-08-2022		
5	Revision and Doubt class	22-08-2022		
6	Effect of an error in a tabular value, One or more missing terms, Examples related to error and missing terms	23-08-2022		
7	Revision and Doubt class	24-08-2022		
8	Test-I	25-08-2022		
9	Chapter 2 Interpolation with equal intervals Interpolation, Newton Gregory formula for forward interpolation	26-08-2022		
10	Newton Gregory formula for Backward Interpolation	27-08-2022		
11	Examples related to Newton Gregory formula for Forward interpolation and Newton Gregory formula for Backward interpolation	29-08-2022		
12	Revision and Doubt class	30-08-2022		

Reviewed by

Date

Remarks

S.No. /Lect.	Topic	Proposed Date	Actual Date	Remarks
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No.				
13	Subdivision of Intervals and Related Examples	31-08-2022		
14	Revision and Doubt class	01-09-2022		
15	Test-II	02-09-2022		
16	Chapter 3 Interpolation with unequal intervals Introduction, Divided Differences	03-09-2022		
17	Ordinary Differences and its Theorems. Newton's Divided Difference interpolation formula for Unequal Intervals.	05-09-2022		
18	Relations between Divided Differences and Ordinary Differences	06-09-2022		
19	Examples related to Divided Differences	07-09-2022		
20	Revision and Doubt class	08-09-2022		
21	Lagrange's Interpolation Formula	09-09-2022		
22	Examples Related to Lagrange's Interpolation Formula	10-09-2022		
23	Hermite's Interpolation Formula for Oscillating Interpolation and related Examples	12-09-2022		
24	Hermite's Interpolation Formula for Oscillating Interpolation and related Examples cont.	13-09-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
25	Revision and Doubt class	14-09-2022		
26	Group Discussion of Short Answer Type Questions of Ch: 1, 2, 3.	15-09-2022		
27	Chapter 4 Central Difference Interpolation formula Introduction, Gauss Forward Interpolation Formula and Its Examples	16-09-2022		
28	Gauss Backward Interpolation Formula and Its Examples	17-09-2022		
29	Revision and Doubt class	19-09-2022		
30	Sterling Formula and Its examples	20-09-2022		
31	Bessel's Formula and Its Examples	21-09-2022		
32	Bessel's Formula and Its Examples cont.	22-09-2022		

33	Revision and Doubt class	24-09-2022		
34	Chapter 5 Probability Distributions Introduction, A brief review of Probability, Events or Cases	27-09-2022		
35	Probability of an Event E, Probability of Equally likely outcomes, Some Results on Probability	28-09-2022		
36	Addition Law of Probability, Conditional Probability	29-09-2022		

Reviewed by **Date** **Remarks**

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
37	Independent Events, Random Variables	30-09-2022		
38	Discrete and Continuous Random Variables, Probability Distributions of Random Variables	01-10-2022		
39	Examples Related to Probability Distributions	03-10-2022		
40	Revision and Doubt class	04-10-2022		
41	Mean and Variance of Random Variables	06-10-2022		
42	Revision and Doubt class	07-10-2022		
43	Binomial Distribution, Mean and Variance of Binomial Distribution	08-10-2022		
44	Examples Related to Binomial Distribution	10-10-2022		
45	Recurrence Formula, Properties of Binomial Distribution, Fitting a Binomial Distribution	11-10-2022		
46	Revision and Doubt class	12-10-2022		
47	Poisson Distribution, Poisson Distribution as a limiting case of Binomial Distribution	13-10-2022		
48	Mean of Poisson Distribution, Variance of Poisson Distribution	14-10-2022		

Reviewed by **Date** **Remarks**

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
49	Recurrence Formula , Fitting a Poisson Distribution	15-10-2022		

50	Examples Related to Poisson Distribution	17-10-2022		
51	Revision and Doubt class	18-10-2022		
52	Normal Distribution, Probability Density Function, Properties of Normal Distribution and Normal Probability Curve	19-10-2022		
53	Standard Normal Distribution, Fitting of a Normal Curve and Its Examples	20-10-2022		
54	Examples Related to Normal Distribution	21-10-2022		
55	Revision and Doubt class	22-10-2022		
56	Chapter 6 Numerical Differentiation Introduction, Derivative using Newton's Forward Interpolation Formula and Its Examples	26-10-2022		
57	Derivative using Newton's Backward Interpolation Formula and Its Examples	27-10-2022		
58	Derivative using Sterling Central Difference Formula and Its Examples	28-10-2022		
59	Derivative using Bessel's Central Difference Formula and Its Examples	29-10-2022		
60	Derivative using Newton's Divided Difference Formula and Its Examples	31-10-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
61	Revision and Doubt class	02-11-2022		
62	Group Discussion of Short Answer Type Questions of Ch: 4, 5, 6	03-11-2022		
63	Chapter 7 Eigen Value Problems Introduction, Eigen Values and Eigen Vectors	04-11-2022		
64	Some properties of Eigen Values, Power Method	05-11-2022		
65	Examples of Power Method, Eigen values of Real Symmetric Matrix	07-11-2022		
66	Orthogonal Rotation Matrix in plane (p, q)	09-11-2022		
67	Revision and Doubt class	10-11-2022		
68	Jacobi Method for Symmetric Matrix	11-11-2022		
69	Examples of Jacobi Method, Tri-Diagonal Matrix	12-11-2022		
70	Given's Method, House Holder's Method and Its Examples	14-11-2022		

71	QR Method, Lanczo's Method and Its Examples	15-11-2022		
72	Assignment	16-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
73	Chapter 8 Numerical Integration Introduction, Newton-Cotes Quadrature Formula, Trapezoidal Rule	17-11-2022		
74	Simpson's one-third rule and Its Examples	18-11-2022		
75	Simpson's three-eighth rule and Its Examples, Error in Quadrature Formulae	19-11-2022		
76	Gauss's Quadrature Formula, Chebyshev's Quadrature Formula	21-11-2022		
77	Revision and Doubt class	22-11-2022		
78	Chapter 9 Numerical Solution of Ordinary Differential Equations Introduction, Solution of a Differential Equation, Initial and Boundary Conditions	23-11-2022		
79	Single Step Method, Multi Step Method, Euler's Method, Modified Euler's Method	24-11-2022		
80	Revision and Doubt class	25-11-2022		
81	Taylor's Series Method, Runge-Kutta Method, Picard's Method	26-11-2022		
82	Revision and Doubt class	28-11-2022		
83	Predictor-Corrector Method, Milne Simpson's Method, Adams-Bashforth Method	29-11-2022		
84	Revision and Doubt class	30-11-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
85	Group Discussion of Short Answer Type Questions of Ch: 7, 8, 9	01-12-2022		
86	Revision and Doubt class	02-12-2022		
87	Revision and Doubt class	03-12-2022		

88	Revision and Doubt class	05-12-2022		
89	Revision and Doubt class	06-12-2022		
90	Revision and Doubt class	07-12-2022		
91	Revision and Doubt class	08-12-2022		
92	Revision and Doubt class	09-12-2022		

Signature of Faculty

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Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/Recommendation):-

Reviewed by H.O.D./Committee

Principal

SAT JINDA KALYANA COLLEGE, KALANAUR (KALANAUR)

LESSON PLAN

Faculty Name: Dr. Satish Narwal
Class/Semester: BA/B.Sc-III/5th Sem.
Commencement Date: 22-08-2022

Subject: Mathematics (Numerical Analysis)
Session: 2022-2023
Semester End Date: 17-12-2022

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
1	Chapter 1 Sets Notations for sets, Representation of sets, Finite sets, Infinite sets	22-08-2022		
2	Singleton set, Empty set, Equal sets, Multiple sets, Cardinal number of a finite set	23-08-2022		
3	Equivalent sets, Subsets, Proper subsets, Power set, Theorem, Universal set, Comparable sets	24-08-2022		
4	Revision and Doubt class	25-08-2022		
5	Venn diagrams, Operations on sets, Union of sets, Intersection of sets, Properties of union and intersection	26-08-2022		
6	Disjoint sets, Complement of a set, Some properties of complement of a set, Difference of sets	27-08-2022		
7	Symmetric difference of sets, Some important theorems on set operations	29-08-2022		
8	Revision and Doubt class	30-08-2022		
9	Applications of set operations	31-08-2022		
10	Applications of set operations cont.	01-09-2022		
11	Ordered pairs, Cartesian product of two sets, Graph	02-09-2022		
12	Some Results on Cartesian products	03-09-2022		

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Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
13	Some results on Cartesian products cont.	05-09-2022		
14	Revision and Doubt class	06-09-2022		
15	Chapter 2 Matrices and Determinants	07-09-2022		

	Matrix, Some definitions			
16	Type of Matrices	08-09-2022		
17	Basic operations on Matrices, Properties of Multiplication of a Matrix by a scalar, Properties of Matrix addition	09-09-2022		
18	Multiplications of Matrices, Properties of Matrix multiplication, Positive integral powers of Matrices	10-09-2022		
19	Introduction of determinants, Determinant of second order Minor and Co-factors	12-09-2022		
20	Expansion of a determinant in terms of Co-factors	13-09-2022		
21	Test-I	14-09-2022		
22	Properties of determinants, Evaluation of determinant without expanding	15-09-2022		
23	Elementary operations	16-09-2022		
24	Area of triangle, Condition of Collinearity of three points	17-09-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
25	Solution of linear equations using determinants, Consistent and inconsistent equations	19-09-2022		
26	Transpose of a Matrix, Symmetric and Skew-symmetric Matrix	20-09-2022		
27	Singular and Non-singular Matrices, Adjoint of a Matrix, theorem	21-09-2022		
28	Inverse of a square Matrix, Theorem	22-09-2022		
29	Solution of system of linear equations using Matrices	24-09-2022		
30	Theorem, Criterion for Consistency	27-09-2022		
31	Chapter 3 Relations and Functions Relation, Domain and range of a Relation	28-09-2022		
32	Properties of Relation	29-09-2022		
33	Equivalence Relation, Partial order Relation, Partial order set	30-09-2022		
34	Functions, Some special types of functions	01-10-2022		

35	Some important functions and their graphs	03-10-2022		
36	Revision and Doubt class	04-10-2022		

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Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
37	Classification of functions	06-10-2022		
38	Identity function, Inverse of a function, Composition of functions	07-10-2022		
39	Identity function, Inverse of a function, Composition of functions cont.	08-10-2022		
40	Chapter 4 Limits and Continuity Limit of a function, Properties of limits	10-10-2022		
41	Method to evaluate limit of a function	11-10-2022		
42	Evaluation of an important limit	12-10-2022		
43	Limit of trigonometric functions, Sandwich theorem	13-10-2022		
44	Limit of Inverse trigonometric functions	14-10-2022		
45	Some important limits	15-10-2022		
46	Evaluation of left and right hand limits	17-10-2022		
47	Revision and Doubt class	18-10-2022		
48	Continuity of a function at a point, Discontinuous functions	19-10-2022		

Reviewed by

Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
49	Types of discontinuity, Algebra of continuous functions	20-10-2022		
50	Types of discontinuity, Algebra of continuous functions cont.	21-10-2022		
51	Continuity on an interval some important theorems on continuous functions	22-10-2022		
52	Intermediate value theorem	26-10-2022		
53	Revision and Doubt class	27-10-2022		

54	Chapter 5 Differentiation Derivative of a function at a point, Method to find derivative of a function from first Principle	28-10-2022		
55	Derivative of a function at a point, Method to find derivative of a function from first Principle cont.	29-10-2022		
56	General theorem on differentiation	31-10-2022		
57	Differentiation of Product of two functions, Differentiation of Quotient of two functions	02-11-2022		
58	Derivative of function of a function (Chain Rule)	03-11-2022		
59	Differentiation of trigonometric functions	04-11-2022		
60	Typical examples of Differentiation of trigonometric functions from first Principle	05-11-2022		

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Date

Remarks

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
61	Differentiation of Inverse trigonometric functions	07-11-2022		
62	Differentiation of Inverse trigonometric functions cont.	09-11-2022		
63	Differentiation of Logarithmic and exponential functions	10-11-2022		
64	Differentiation of Implicit functions	11-11-2022		
65	Logarithmic Differentiation	12-11-2022		
66	Logarithmic Differentiation cont.	14-11-2022		
67	Test-II	15-11-2022		
68	Differentiation in case of Parametric functions	16-11-2022		
69	Differentiation in case of Parametric functions cont.	17-11-2022		
70	Differentiation of a function with respect to another function	18-11-2022		
71	Revision and Doubt class	19-11-2022		
72	Assignment	21-11-2022		

Reviewed by _____ Date _____ Remarks _____

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
73	Chapter 6 Indefinite Integral Introduction, Indefinite integral, Standard elementary integrals	22-11-2022		
74	Some theorems on integration	23-11-2022		
75	Integration by substitution	24-11-2022		
76	Two fundamental deductions of method of substitution	25-11-2022		
77	Four standard forms	26-11-2022		
78	Integration	28-11-2022		
79	Some special integrals	29-11-2022		
80	Some special integrals cont.	30-11-2022		
81	Integrals of the form	01-12-2022		
82	Integrals of the form cont.	02-12-2022		
83	Integration by parts	03-12-2022		
84	Integration by parts cont.	05-12-2022		

Reviewed by _____ Date _____ Remarks _____

S.No. /Lect. No.	Topic	Proposed Date	Actual Date	Remarks
85	Integrals	06-12-2022		
86	Three standard forms	07-12-2022		
87	Partial fractions and their uses in integration	08-12-2022		
88	Reduction formulae, Some more Reduction formulae	09-12-2022		
89	Chapter 7 Definite integral Introduction, Definite integral as a limit of a sum, Definite integral	10-12-2022		
90	Fundamental theorem of integral calculus	12-12-2022		
91	Some properties of Definite integral	13-12-2022		
92	Some properties of Definite integral cont.	14-12-2022		
93	Revision and Doubt class	15-12-2022		
94	Revision and Doubt class	16-12-2022		

95	Revision and Doubt class	17-12-2022		
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Signature of Faculty

Reviewed by

Date

Remarks

Overall observation (Problem faced/Improvement Suggestion/Recommendation):-

Reviewed by H.O.D./Committee

Principal