I.B. (PG) COLLEGE, PANIPAT
(SESSION 2019-20)

Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- VECTOR CALCULUS Class:- B.Sc. I Year

Name of the Teacher (Section wise): Ms. GITIKA DUREJA

WEEK	DATE	TOPICS
1	January (1 - 4)	Inroduction to Vectors
		Definitions and examples on Scalar Triple Product
		Properties of Scalar Triple Product
		Examples on related Topic
SUNDAY - 05.01.2020		
2	January (6-11)	Examples on related Topic
		Definitions and examples on Vector Triple Product
		Examples on related Topic
		Examples on related Topic
		Properties of Scalar Triple Product
		Vector Product of four vectors
SUNDAY - 12.01.2020		
3	January (13-18)	Examples on related Topic
		More Examples
		Reciprocal System of Vectors : Definition and Some Results
		Properties of Reciprocal System of Vectors
		Examples on related Topic
		More Examples
SUNDAY - 19.01.2020		
4	January (20 -25)	Problems Discussion
		Test
		Differentiation of Vectors
		Theorem on Continuity of Vectors
		Some more Theorems
		Related Examples
January - 26.01.2020		
5	January (27- 31) February (1)	Related Examples
		Curves In Space
		Related Examples
		Related Examples
		Related Examples
		Total differentials of Vectors
SUNDAY - 02.02.2020		
6	February (3 -8)	Rules for finding Partial Derivative of Vectors
		Related Examples
		The vector Differential Operator
		Gradient of a Scalar Field
		Properties of Gradient
		Related Examples

SUNDAY - 09.02.2020		
7	February (10 -15)	Related Examples
		Problems Discussion
		Examples on Level Surfaces
		Divergence of a Vector function
		Properties of Divergence
		Related Examples
SUNDAY - 16.02.2020		
8	February (17-22)	Related Examples
		Curl of a Vector Point Function
		Properties of Curl
		Related Examples
		Related Examples
		Laplacian Operator, Harmonic Function
SUNDAY - 23.02.2020		
9	February (24-29)	Related Examples
		Problems Discussion
		Test
		Curvilinear Co-ordinates
		Arc length, Volume Element and area element
		Arc length, Volume Element and area element
SUNDAY - 01.03.2020		
10	March (02 -07)	Gradient,divergence and curl in terms of curvilinear co-ordinates
		Gradient,divergence and curl in terms of curvilinear co-ordinates
		Spherical Co-ordinates
		Spherical Co-ordinates
		Cylinderical Co-ordinates
		Cylinderical Co-ordinates
SUNDAY - 08.03.2020		
11	March (09 -14)	**Holi Vacations**
		Holi Vacations
		Holi Vacations
		Holi Vacations
		Holi Vacations
		Holi Vacations
SUNDAY - 15.03.2020		
12	March (16 -21)	Vector Integration
		Some Results for Integration
		Related Examples
		Line Integrals
		Line Integrals
		Related Examples
SUNDAY - 22.03.2020		
13	March (23-28)	Related Examples
		Related Examples
		Problems Discussion
		Test
		Related Examples
		Related Examples

SUNDAY - 29.03.2020		
14	March (30 -31) April (1-4)	Volume Integrals
		Volume Integrals
		Related Examples
		Related Examples
		Related Examples
		Problems Discussion
SUNDAY - 05.04.2020		
15	April (06 -11)	Test
		Gauss's divergence Theorem
		Gauss's divergence Theorem
		Some imp Deductions
		Some imp Deductions
		Related Examples
SUNDAY - 12.04.2020		
16	April (13-18)	Related Examples
		Related Examples
		Related Examples
		Problems Discussion
		Test
		Green's Theorem
SUNDAY - 19.04.2020		
17	April (20-25)	Related Examples
		Related Examples
		Related Examples
		Problems Discussion
		Stoke's Theorem
		Stoke's Theorem in Cartesian form
SUNDAY - 26.04.2020		
18	April (27-30)	Related Examples
		Related Examples
		Problems Discussion
		Test

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Inorganic chemirtry **Class: B.Sc. I Year (A)**

Name of the Teachers (Section wise): Prof. Shilpa

WEEK	DATE	TOPICS
1	January (1 - 4)	Hydrogen Bonding and Van der Waals forces
		Hydrogen Bonding – Definition, types, effects of hydrogen bonding on
		properties of substances, application
		SUNDAY - 05.01.2020
2	January (6-11)	Brief discussion of various types of Van der Waals forces
		SUNDAY - 12.01.2020
3	January (13-18)	Metallic Bond and semiconductors
		Metallic bond – Qualitative idea of valence bond and Band theories of metallic
		bond (conductors, semiconductors, insulators).
		SUNDAY - 19.01.2020
4	January (20 -25)	Semiconductors – Introduction, types and applications.
		discussion on application of above topic
		January - 26.01.2020
5	January (27- 31) February (1)	**s-Block elements**
		Comparative study of the elements including diagonal relationship, Anomalous
		behaviour of Lithium and Beryllium compared to other elements in the same
		group,
		SUNDAY - 02.02.2020
6	February (3 -8)	salient features of hydrides, oxides, halides, hydroxides (methods of
		preparation excluded), behaviour of solution in liquid NH3.
		SUNDAY - 09.02.2020
7	February (10 -15)	Chemistry of Noble Gases
		General physical properties, low chemical reactivity, chemistry of xenon, structure
		and bonding in fluorides, oxides and oxyfluorides of xenon.
		SUNDAY - 16.02.2020
8	February (17 -22)	p-Block elements:
		Electronic configration, atomic and ionic size, matallic character, melting point
		class test
		SUNDAY - 23.02.2020
9	February (24-29)	
		ionization energy, electron affinity, electronegativity, inert pair effect and diagonal
		relationship.

SUNDAY - 01.03.2020		
10	March (02 -07)	**Boron family (13th group):**
		Diborane: Preparation, properties and structure (as an example of electron
		deficient compound and multicenter bonding),
SUNDAY - 08.03.2020		
11	March (09 -14)	
		HOLI BREAK
SUNDAY - 15.03.2020		
12	March (16 -21)	
		Borazine chemical properties and
		structure, relative strength of Trihalide of Boron as lewis acids, structure of
		aluminium(III) chloride.
SUNDAY - 22.03.2020		
13	March (23-28)	Carbon family and Nitrogen family (14th and 15th group):
		Catenation, Carbides, fluoro carbons, silicates (structural aspects).
		Oxides: Structure of oxides of nitrogen and phosphorus,
SUNDAY - 29.03.2020		
14	March (30 -31) April (1-4)	Oxyacids : Structure and
		relative acid strength of oxy acids of nitrogen and phosphorus, structure of white
		and Red phosphorus.
SUNDAY - 05.04.2020		
15	April (06 -11)	**Oxygen family (16th group):**
		Oxy acids of sulphur – structure and acidic strength,
SUNDAY - 12.04.2020		
16	April (13-18)	Hydrogen Peroxide –
		properties and uses.
SUNDAY - 19.04.2020		
17	April (20-25)	Halogen family (17th group):
		Interhalogen compounds (their properties and structures)
SUNDAY - 26.04.2020		
18	April (27-30)	Hydra and oxy acids of
		chlorine – structure and comparison of acid strength, cationic nature of Iodine

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- English **Class: B.Sc. I Year**

Name of the Teachers (Section wise): vandana Rohal

WEEK	DATE	TOPICS
1	January (1 - 4)	Introduction to the syllabus
		Introduction to the syllabus
		Introduction to the syllabus
		Introduction to the syllabus
SUNDAY - 05.01.2020		
2	January (6-11)	ch-1 our civilization introduction
		ch-1 our civilization introduction
		ch-1 our civilization introduction
		ch-1 our civilization introduction
		ch-1 our civilization introduction
		ch-1 our civilization introduction
SUNDAY - 12.01.2020		
3	January (13-18)	ch-1 question answer
		ch-1 question answer
		ch-1 question answer
		ch-1 question answer
		ch-1 question answer
		ch-1 question answer
SUNDAY - 19.01.2020		
4	January (20 -25)	ch-2 it's question time summary
		ch-2 it's question time summary
		ch-2 it's question time summary
		ch-2 it's question time summary
		ch-2 it's question time summary
		ch-2 it's question time summary

January - 26.01.2020		
5	January (27- 31) February (1)	**ch-2 question answer**
		ch-2 question answer
		ch-2 question answer
		ch-2 question answer
		ch-2 question answer
		ch-2 question answer
SUNDAY - 02.02.2020		
6	February (3 -8)	translation from English to hindi
		translation from English to hindi
		translation from English to hindi
		translation from English to hindi
		translation from English to hindi
		translation from English to hindi
SUNDAY - 09.02.2020		
7	February (10 -15)	ch-3 an interview with Christian Barnard summary
		ch-3 an interview with Christian Barnard summary
		ch-3 an interview with Christian Barnard summary
		ch-3 an interview with Christian Barnard summary
		ch-3 an interview with Christian Barnard summary
		ch-3 an interview with Christian Barnard summary
SUNDAY - 16.02.2020		
8	February (17-22)	ch-3 question answer
		ch-3 question answer
		ch-3 question answer
		ch-3 question answer
		ch-3 question answer
		ch-3 question answer
SUNDAY - 23.02.2020		
9	February (24-29)	ch-4 untouchability and the caste system summary
		ch-4 untouchability and the caste system summary
		ch-4 untouchability and the caste system summary
		ch-4 untouchability and the caste system summary
		ch-4 untouchability and the caste system summary
		ch-4 untouchability and the caste system summary

SUNDAY - 01.03.2020		
10	March (02 -07)	**precis writing**
		precis writing
		precis writing
		precis writing
		precis writing
		precis writing
SUNDAY - 08.03.2020		
11	March (09 -14)	ch-5 inhumanisation of war summary
		ch-5 inhumanisation of war summary
		ch-5 inhumanisation of war summary
		ch-5 inhumanisation of war summary
		ch-5 inhumanisation of war summary
		ch-5 inhumanisation of war summary
SUNDAY - 15.03.2020		
12	March (16 -21)	ch-4 question answer
		ch-4 question answer
		ch-4 question answer
		ch-4 question answer
		ch-4 question answer
		ch-4 question answer
SUNDAY - 22.03.2020		
13	March (23-28)	ch-5 question answer
		ch-5 question answer
		ch-5 question answer
		ch-5 question answer
		ch-5 question answer
		ch-5 question answer

SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	letter writing
		letter writing
		letter writing
		letter writing
		letter writing
		letter writing
SUNDAY - 05.04.2020		
15	April (06 -11)	**ch-6 seven types of gender equality summary**
		ch-6 seven types of gender equality summary
		ch-6 seven types of gender equality summary
		ch-6 seven types of gender equality summary
		ch-6 seven types of gender equality summary
		ch-6 seven types of gender equality summary
SUNDAY - 12.04.2020		
16	April (13-18)	ch-6 question answer
		ch-6 question answer
		ch-6 question answer
		ch-6 question answer
		ch-6 question answer
		ch-6 question answer
SUNDAY - 19.04.2020		
17	April (20-25)	grammar revision
		grammar test
		grammar revision
		grammar test
		grammar revision
		grammar test
SUNDAY - 26.04.2020		
18	April (27-30)	lesson revision
		lesson revision
		lesson test
		lesson test

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Logical Organisation **Class: B.Sc. I Year Sem-2**

Name of the Teachers (Section wise): Deepty juneja

WEEK	DATE	TOPICS
1	January (1 - 4)	Number System
		Introduction of Number System, Decimal Number System
SUNDAY - 05.01.2020		
2	January (6-11)	Conversion of Decimal Number to Binary Number
		Conversion of Fractional decimal number to Binary Number
		Octal Number System,Conversion of Decimal Number System to Octal Number System
SUNDAY - 12.01.2020		
3	January (13-18)	Conversion of Octal Number into Binary & vice Versa
		Hexadecimal Number System, Conversion of decimal number into hexadecimal & vice versa
		(Binary Arithmetic) Binary Addition & Binary Subtraction
SUNDAY - 19.01.2020		
4	January (20 -25)	Complement Representation of Number
		Binary Subtraction by Complement Method
		Comparisons between 1's & 2's Complement

January - 26.01.2020		
5	January (27- 31) February (1)	Representation of Negative Numbers into Complement system
		BCD
		Binary Division, Fixed Point representation of Number
SUNDAY - 02.02.2020		
6	February (3 -8)	BCD Codes
		Error Detecting & Correcting Codes
		ASCII , EBCDIC
SUNDAY - 09.02.2020		
7	February (10 -15)	Assignment I
		Introduction Of Boolean Algebra & postulates
		Boolean Functions
SUNDAY - 16.02.2020		
8	February (17-22)	Truth Tables, Canonical & standard form of Boolean functions
		Canonical & standard form of Boolean functions
		Venn Diagram
SUNDAY - 23.02.2020		
9	February (24-29)	K-Map
		Basic Gates-AND, OR , NOT
		Universal Gates NAND,NOR

SUNDAY - 01.03.2020		
10	March (02 -07)	XOR, XNOR etc.
		Assignment II
		Conditional Test
		Half Adder, Full Adder
SUNDAY - 08.03.2020		
11	March (09 -14)	HOLI BREAK
SUNDAY - 15.03.2020		
12	March (16 -21)	Half Subtractor, Full Subtractor
		Encoder,Decoder
		Multiplexer
SUNDAY - 22.03.2020		
13	March (23-28)	Demultiplexer, Comparator
		Code Converter
		Introduction & characteristics of Sequential logic, Introduction of Flip Flop, Clocked SR
		D- type , JK
		T- type, Master & Slave
SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	State Table , State Diagram
		Exitation Table
		Registers, SISO, PIPO etc.

SUNDAY - 05.04.2020		
15	April (06 -11)	Synchronize Counters
		Asynchronies Counters
		Revision
SUNDAY - 12.04.2020		
16	April (13-18)	
SUNDAY - 19.04.2020		
17	April (20-25)	
SUNDAY - 26.04.2020		
18	April (27-30)	

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Number Theory and Trignometry **Class : B.Sc. Ist Year**

Name of the Teachers (Section wise): Dr. Arpana Garg (Sec- A,C)

WEEK	DATE	TOPICS
1	January (1 - 4)	De Moivre's Theorem
		Its Examples and Problems
		Disscusion
	SUNDAY - 05.01.2020	
2	January (6-11)	Roots of a Complex Number
		Theorems Based on Roots of a complex Number
		Its Examples and Problems
		Solution Of Equations
		Problems
		Expansion of Trignometric Functions
	SUNDAY - 12.01.2020	
3	January (13-18)	Expansion of Trignometric Functions
		Formation of Equations
		Its Examples and Problems
		Expansion of Powers of Trignometric Functions
		Expansion of Powers of Trignometric Functions
		Problems and Test of the Chapter
	SUNDAY - 19.01.2020	
4	January (20 -25)	Exponential Function of complex Variable
		Problems and discussion
		Circular Function of a complex variable
		Hyperbolic function
		Problems
		Seperation of Functions into real and imaginary part
	January - 26.01.2020	
5	January (27 -31) February (1)	Seperation of Functions into real and imaginary part
		Logrithmic Function
		Problems
		Exponential Function
		Problems
	SUNDAY - 02.02.2020	
6	February (3 -8)	Inverse Trignometry Function
		Inverse Trignometry Function
		Inverse Hyperbolic Function
		Problems
		Gregory's Series

SUNDAY - 09.02.2020		
7	February (10 -15)	Summation of series
		Summation of series
		Method of Difference
		C+iS method of Summation
SUNDAY - 16.02.2020		
8	February (17-22)	Problems and Discussion
		Types of C+iS Method Problems
		Problem Discussion
		Test
SUNDAY - 23.02.2020		
9	February (24-29)	Divisibility
		Principle of Mathematical Induction
		Examples
		Problems
		Division Algorithm
SUNDAY - 01.03.2020		
10	March (02 -07)	Division Algorithm
		Examples
		Fundamental Theorem of Arithmetic
		Examples
		Congruences
SUNDAY - 08.03.2020		
11	March (09 -14)	**Holi Break**
		Holi Break
		Holi Break
		Holi Break
		Holi Break
		Holi Break
SUNDAY - 15.03.2020		
12	March (16 -21)	Linear Congruence
		Examples
		Problems
		Diophantine Equation
		Examples
		Problems
SUNDAY - 22.03.2020		
13	March (23-28)	Fermat Theorem
		Examples
		Problems
		Wilsons Theorem
		Examples
		Problems

SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Eulers Function
		Examples
		Problems
		Residue System
		Problems
SUNDAY - 05.04.2020		
15	April (06 -11)	Chinese Remainder Theorem
		Examples
		Problems
		Quadratic Residue
		Theorems
SUNDAY - 12.04.2020		
16	April (13-18)	Examples
		Problems
		Quadratic Reciprocality Law
		Examples
		Problems
SUNDAY - 19.04.2020		
17	April (20-25)	Some Functions of Number Theory
		Greatest Integer Function
		Examples
		Arithmetic Functions
		Mobius Function
SUNDAY - 26.04.2020		
18	April (27-30)	Mobius Function
		Examples

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- ORGANIC CHEMISTRY CLASS: B.Sc I Year

Name of the Teachers (Section wise): PROF.(RANJANA SHARMA)

WEEK	DATE	TOPICS
1	January (1 - 4)	Alkene s Nomenc lature of alkenes, mechanisms of dehydration of alcohol s and dehydrohalogenation of alkyl halide.
SUNDAY - 05.01.2020		
2	January (6-11)	 The Saytzeff rule, Hofmann elimination, physical proper ties and relative stabilities of alkenes.
Sunday-12.01.2020		
3	January (13-18)	 Chemica l reactions of alkenes□mechanisms involved in **hydrogenation, electrophilic and free radical additions,** Markownikoff's rule
SUNDAY - 19.01.2020		
4	January (19-25)	 hydroboration–oxidation, oxymercurationreduction, ozonolysis, hydration, hydroxylation and oxidat ion with KMnO4 .
January - 26.01.2020		
5	January (26-1)	 Arenes and Aromaticity **Nomenc lature of benzene deriva tives : Aromatic nucleus and side** chain.

SUNDAY - 02.02.2020		
6	February (2-8)	Aromaticity: the Huckel rule, aroma tic ions, annulenes up to 10 carbon atoms,
SUNDAY - 09.02.2020		
7	February (10 -15)	aromatic, anti-aromatic and non-aromatic compounds. class test
SUNDAY - 16.02.2020		
8	February (17-22)	Aromatic electrophil ic substitut ion □ general pattern of the mechani sm, mechans im of nitration, halogenation,
SUNDAY - 23.02.2020		
9	February (23-29)	sulphonation, and Friedel-Crafts reaction. Energy profile diagrams.
SUNDAY - 01.03.2020		
10	march(2-7)	Activating , deactivating substituents and orientation. question discussion with students
SUNDAY - 08.03.2020		
11	March (09 -14)	HOLY BREAK
SUNDAY - 15.03.2020		
12	March (16 -21)	Dienes and Alkynes **Nomenc lature and classification of dienes: isolated, conjugated and** cumulated dienes
SUNDAY - 22.03.2020		
13	March (23-28)	Structur e of butadiene. Chemical reactions □ 1,2 and 1,4 additions (Electrophilic & free radical mechanism), Diels-Alder reaction,

SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Nomenclature, structure and bonding in **alkynes. Methods of formation.**
SUNDAY - 05.04.2020		
15	April (06 -11)	**Chemical reactions of alkynes,** **acidity of alkynes. Mechanism of e lectrophilic and nucleophilic** addition reactions, hydroboration-oxidation of alkynes.
SUNDAY - 12.04.2020		
16	April (13-18)	Alkyl and Aryl Halides Nomenc lature and classes of alkyl halides, methods of formation, chemical reactions.
SUNDAY - 19.04.2020		
17	April (20-25)	Mechanisms and stereochemistry of nucleophilic substitution reactions of alkyl halides, SN2 and SN1 reactions with energy profile diagrams.
SUNDAY - 26.04.2020		
18	April (27-30)	Methods of formation and reactions of a ryl halides, The additioneliminat ion and the elimination-addition mechanisms of nucleophilic aromatic substitution rea ctions. Relative reactivitie s of alkyl halides v s allyl, vinyl and aryl halide

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Physical chemistry Class : B.Sc. First year

Name of the Teachers (Section wise): Prof. Vikram Kumar

WEEK	DATE	TOPICS
1	January (1 - 4)	Kinetics
		Rate of reaction, rate equation and its types
SUNDAY - 05.01.2020		
2	January (6-11)	factors influencing
		the rate of a reaction – concentra tion, temperature, pressure,
		solvent, light, catalyst.
SUNDAY - 12.01.2020		
3	January (13-18)	Order of a reaction, integrated r ate
		expression for zero order,
SUNDAY - 19.01.2020		
4	January (20 -25)	first order, second and third order
		reactions
January - 26.01.2020		
5	January (27- 31) February (1)	**Half life period of a reaction.**
		numerical problems based on half life period
SUNDAY - 02.02.2020		
6	February (3 -8)	Effect of temperature on
		the rate of reaction – Arrhenius equat ion.
SUNDAY - 09.02.2020		
7	February (10 -15)	Theories of reaction rate
		– Simple collision theory for unimolecular collision
SUNDAY - 16.02.2020		
8	February (17-22)	Transition
		state theory of bimolecular reactions.

SUNDAY - 23.02.2020		
9	February (24-29)	Electrochemistry Electrolytic conduction,
SUNDAY - 01.03.2020		
10	March (02 -07)	**factors aff e cting ele ctrolytic conduct ion,** specific conductance, molar conductance,equivalent conductanc e and relation among them, their variation with concentration
SUNDAY - 08.03.2020		
11	March (09 -14)	holi break
SUNDAY - 15.03.2020		
12	March (16 -21)	Arrhenius theory of ionization, **problem discussion on the basis of above topic**
SUNDAY - 22.03.2020		
13	March (23-28)	Ostwald's Dilution Law + class test
SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Debye- Huckel – Onsager's equation for strong electrolytes (elementary treatment only)
SUNDAY - 05.04.2020		
15	April (06 -11)	**Applica tion of Kohlr ausch's Law in calculation of** **conductance of weak electrolytes at infinite dilution.**
SUNDAY - 12.04.2020		
16	April (13-18)	Applications of conductivity measurements: determinat ion of degree of dissociation,
SUNDAY - 19.04.2020		
17	April (20-25)	 determination of Ka of acids determination of solubility product of sparingly soluble salts, conduc tometr ic titrations. Concepts of pH and pKa ,
SUNDAY - 26.04.2020		
18	April (27-30)	Buffer solution, Buffer action, Henderson – Hazel equation, Buffer mechanism of buffer action.

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Programming in C **Class:-BSC I Year Sem-2**

Name of the Teachers (Section wise): Tanu Baweja

WEEK	DATE	TOPICS
1	January (1 - 4)	Overview of C;History,Imoortance and Structure of C program
		Elements of C;Character set,Identifiers and Keywords.
SUNDAY - 05.01.2020		
2	January (6-11)	Data Types;Constants and Variables
		Assignment Statement ,Symbolic Statements.
SUNDAY - 12.01.2020		
3	January (13-18)	Input/Output;Unformatted and formatted I/O function
		Input function and Output function
SUNDAY - 19.01.2020		
4	January (20 -25)	Input and output function
		Operators and Expressions:Operators:Arithmetic,Relational,Logical,
		Bitwise etc.
January - 26.01.2020		

5	January (27- 31) February (1)	**Arithmetic Expressions;Evaluation of arithmetic expressions,Type casting**
		and conversion,operator hierarchy and associativity
SUNDAY - 02.02.2020		
6	February (3 -8)	Decision making and branching:Decision making with IF statement,IF-ELSE
		statement,Nested IF statement,
SUNDAY - 09.02.2020		
7	February (10 -15)	ELSE-IF ladder,Switch statement,GOTO statement.
		Revision of statements…
		Assignment1
SUNDAY - 16.02.2020		
8	February (17-22)	Decision Making and Loo[ping;For,While,Do-While,jump in loops,
		Break,Continue statement
SUNDAY - 23.02.2020		
9	February (24-29)	Functions;Definnitions,prototype,passing parameters ,recursion
		Assignment 2

SUNDAY - 01.03.2020		
10	March (02 -07)	**torage class.Storage classes in c;Auto,extern,register and static s**
		scope of class
SUNDAY - 08.03.2020		
11	March (09 -14)	
		HOLI BREAK
SUNDAY - 15.03.2020		
12	March (16 -21)	scope of class,storage of class &lifeline
		Conditinal Test
SUNDAY - 22.03.2020		
13	March (23-28)	Arrays;Definitions,types,initializing and processing an array
		Problems discussion
SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Revision
		Revision
		Revision

SUNDAY - 05.04.2020		
15	April (06 -11)	
SUNDAY - 12.04.2020		
16	April (13-18)	
SUNDAY - 19.04.2020		
17	April (20-25)	
SUNDAY - 26.04.2020		
18	April (27-30)	

I.B. (PG) COLLEGE, PANIPAT
(SESSION 2019-20)

Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Ordinary Differential Equations Class: B.Sc.-1st Year

Name of the Teachers (Section wise): Ms. Srishti Jindal

WEEK	DATE	TOPICS
1	January (1 - 4)	Exact Differential Equations, Introduction to Differential Equations, Types of Differential Equations, Formation of Differential Equations, Geometrical Meaning, Theorems and Questions based on Formation of Differential Equations.
		SUNDAY - 05.01.2020
2	January (6-11)	Theorems based on Exact Differential Equations, Definition of Integrating Factor, Rules for finding Integrating Factor and problems based on it, Finding Integrating Factor by Inspection, Different Methods for Solving Exact Differential Equations and Questions based on it and Discussion of Problems.
		SUNDAY - 12.01.2020
3	January (13-18)	Introduction to Equations of First Order but not of First Degree and Theorems based on it, Methods of solving Equations of First Order with degree higher than one, Solution of Equations solvable for x, Methods of solving equations solvable for y and problems based on it.
		SUNDAY - 19.01.2020
4	January (20 -25)	Introduction to Lagrange's Equation and method for solving such Equations, Introduction to Clairaut's Equation and method for solving such Equations, Equations reducible to Clairaut's form and problems based on it, singular Solution, Discriminant, Questions related to p-Discriminant and c-Discriminant and Discussion of Problems.
		January - 26.01.2020
5	January (27- 31) February (1)	Introduction to Orthogonal Trajectories, Orthogonal Trajectories in Cartesian Co-ordinates, Methods for finding Orthogonal Trajectories in Cartesian Co-ordinates, Orthogonal Trajectories in Polar Co-ordinates, Methods for finding Orthogonal Trajectories in Polar Co-ordinates and Questions based on it and Discussion of Problems.
		SUNDAY - 02.02.2020
6	February (3 -8)	Introduction to Linear Differential Equations with Constant Coefficients, Differential Operator, Complete solution of Linear Differential Equations, Auxiliary Equations, Methods for finding roots of Auxiliary Equations and finding Complete solution of Linear Differential Equations, Inverse operator, Theorems based on Linear Differential Equations.
		SUNDAY - 09.02.2020
7	February (10 -15)	Problems based on finding roots of Auxiliary Equations and finding Complete solution of Linear Differential Equations, Introduction to the concept of Particular Integral and discussion of different methods of finding Particular Integral, Questions based on finding solutin of Linear Differential and Discussion of Problems.

SUNDAY - 16.02.2020		
8	February (17-22)	Introduction to Homogeneous Linear Differential Equations, Discussion of methods of solving Homogeneous Linear Differential Equations, Questions based on solution of Homogeneous Linear Differential Equations and Discussion of Problems.
SUNDAY - 23.02.2020		
9	February (24-29)	Equations reducible to Homogeneous Linear form and Discussion of methods of solving Equations reducible to Homogeneous Linear form, Questions based on it and Discussion of Problems.
SUNDAY - 01.03.2020		
10	March (02 -07)	Definitin of Linear Differential Equations of Second order and its examples, Solution of Linear Differential Equations of Second order by changing the dependent variable when an integral included in the complementary function is known and questions based on it, solutin of such equations by removing first derivative and changing the dependent variable and problems related to it.
SUNDAY - 08.03.2020		
11	March (09 -14)	**Holi Vacations**
SUNDAY - 15.03.2020		
12	March (16 -21)	Solution of Linear Differential Equations of Second order by changing the independent variable and problems related to it and Discussion of Problems. Introduction to the method of Variation of Parameters and questions based on it.
SUNDAY - 22.03.2020		
13	March (23-28)	Solution of Linear Differential Equations of Second order by the method of undetermined coefficients, different ways of finding solution of these equations, questions based on it and Discussion of Problems.
SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Introduction to Ordinary Simultaneous Differential Equations- Definition and Examples, Methods of solving Simultaneous Differential Equations with constant coefficients and questions related to it, Solution of Simultaneous Differential Equations using Differential Operator and problems based on it.
SUNDAY - 05.04.2020		
15	April (06 -11)	Solution of Simultaneous Differential Equations using Method of Differentiation, Discussion of some other methods for solving Simultaneous Differential Equations and questions related to it, Solution of Simultaneous Differential Equations using Method of finding the second integral with the help of first integral and Discussion of Problems.

SUNDAY - 12.04.2020		
16	April (13-18)	Total Differential Equations- Definition and Examples, Theorem for the
		Integrability of Total Differential Equations and questions based on it,
		Concept of Condition for Exactness, Solution of Total Differential Equations
		by using method of inspection and problems related to it.
SUNDAY - 19.04.2020		
17	April (20-25)	Solution of Total Differential Equations by regarding one variable as constant
		out of three variables and questions based on it, Method for solving
		Homogeneous Equations and problems related to it.
SUNDAY - 26.04.2020		
18	April (27-30)	Solution of Total Differential Equations by using method of Auxiliary Equation
		and Discussion of Problems.
		Revision.