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

Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:- Elements of Mathematical Foundations   Class : B.C.A 2nd year

Name of the Teachers (Section wise):Ms. Soniya

WEEK	DATE	TOPICS
1	January (1 - 4)	Matrix,order of matrix,types of matrix
		Basic operations on matrices
		Properties of addition and multiplication of matrix
		Test
		SUNDAY - 05.01.2020
2	January (6-11)	Multiplication of matrices and their properties
		Problem disscussion
		Determinant of matrix
		Minors and cofactors
		Singular and non singular of matrix,transpose of matrix
		Properties of transpose matrix
		SUNDAY - 12.01.2020
3	January (13-18)	Adjoint of matrix
		Properties of adjoint of matrix
		Inverse of square matrix and related theorems
		Symmetric,skew symmetric matrices
		Hermition, skew hermition matrices
		Problem disscussion
		SUNDAY - 19.01.2020
4	January (20 -25)	Test
		Sub matrix and Rank of a matrix
		Elementary operations
		Equivalent matrices and related theorems
		Row and column echelon matrix
		Problem disscussion
		January - 26.01.2020
5	January (27- 31) February (1)	Test
		Reduction of a matrix into tringular form
		Related theorems based upon triangular form
		Normal form of a matrix
		Theorems based on normal form of matrix
		Using elementary operation find inverse of matrix
		SUNDAY - 02.02.2020
6	February (3 -8)	Problem disscussion
		Test
		To calculate P and Q
		Solution of system of linear non-homogeneous equation using inverse
		Solution of system of linear non-homogeneous equation using inverse
		Related theorems based upon non homogeneous equation

		SUNDAY - 09.02.2020
7	February (10 -15)	Problem disscussion
		Test
		Solution of system of linear homogeneous equation using inverse
		Solution of system of linear homogeneous equation using rank
		Solution of system of linear homogeneous equation using rank
		Problem disscussion
		SUNDAY - 16.02.2020
8	February (17-22)	Solution of system of linear non-homogeneous equation using rank
		Solution of system of linear non-homogeneous equation using rank
		Test
		Characteristic equation of a square matrix
		Cayley-Hamilton theorem
		Eigen values and eigen vector
		SUNDAY - 23.02.2020
9	February (24-29)	Eigen values and eigen vector of symmetric matrix
		Eigen values and eigen vector of skew symmetric matrix
		Problem disscussion
		Test
		Eigen values and eigen vector of hermition matrix
		Diagonalization of a sq. matrix
		SUNDAY - 01.03.2020
10	March (02 -07)	Diagonalization of a sq. matrix
		Logicl statements,Truth table,simple and compound statements.
		Negation of compound statements,implication
		Conditional statement,variants of conditional
		biconditional statements,argument
		Joint denial,Tautologies
		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)	Problem disscussion
		Test
		logical equivalence,contradiction
		Law of logic
		Law of logic
		Quantifiers,universal quantifiers
		SUNDAY - 22.03.2020
13	March (23-28)	Existential quantifiers,negation of statements with quantifiers
		Problem disscussion
		Test
		Principle of mathematics induction
		Principle of mathematics induction

SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Problem disscussion
		Test
		Binary operation,composite table
		Properties of binary operation
		Group,semi group,finite and infinite group,order of a finite group
		Addition and multiplication modulo m,
SUNDAY - 05.04.2020		
15	April (06 -11)	Order of an elements of a group,general properties of group
		Problem disscussion
		Complexes and sub group
		Theorems based on sub group
		Cosets
		Normal,simple group
SUNDAY - 12.04.2020		
16	April (13-18)	Quotient group
		Homomorphism
		Isomorphism
		Test
		Ring,types of ring
		Integral domain,skew field,field
SUNDAY - 19.04.2020		
17	April (20-25)	Problem disscussion
		Subring
		Characteristic of ring
		Ideals,simple ring
		Maximal ideal,principle ideal
		Prime ideal,nilpotent and nill ideal
SUNDAY - 26.04.2020		
18	April (27-30)	Problem disscussion
		Ring homomorphism
		Kernal of a ring homomorphism
		Test

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:-   **Management Information System**   **Class: BCA II**

Name of the Teachers (Section wise): Ms. Charu Mukhija

WEEK	DATE	TOPICS
1	January (1 - 4)	Introduction to System and basics system concepts
		Types of Systems
		continue
	SUNDAY - 05.01.2020	
2	January (6-11)	The System Approach
		Information System: Definition and Characteristics
		Types of Information
	SUNDAY - 12.01.2020	
3	January (13-18)	continue
		Role of Information in Decision Making
		Sub-System of an Information System: EDP and MIS Management levels
	SUNDAY - 19.01.2020	
4	January (20 -25)	continue
		EDP/MIS/DSS
		Group Discussion

		January - 26.01.2020			
5	January (27- 31) February (1)	An Overview of Management Information System: Definition and Characteristics			
		Components of MIS			
		continue			
		SUNDAY - 02.02.2020			
6	February (3 -8)	Framework for understanding MIS: Information Requirement			
		and levels of Management			
		continue			
		Simon's model of Decision-Making			
		SUNDAY - 09.02.2020			
7	February (10 -15)	Structured and Unstructured Decisions			
		continue			
		Formal vs Informal Systems.			
		SUNDAY - 16.02.2020			
8	February (17-22)	Group Discussion			
		Assignment -1			
		Developing Information Systems: Analysis and Design of Information Systems			

		SUNDAY - 23.02.2020			
		continue			
		Implementation and Evaluation			
9	February (24-29)	continue			
		SUNDAY - 01.03.2020			
		Pitfalls in MIS Development			
		continue			
10	March (02 -07)	Group Discussion			
		SUNDAY - 08.03.2020			
		Vacation			
		Vacation			
11	March (09 -14)	Vacation			
		Vacation			
		Vacation			
		Vacation			
		SUNDAY - 15.03.2020			
		Introduction to Functional MIS			
		Conditional Test			
12	March (16 -21)	Group Discussion			
		SUNDAY - 22.03.2020			
		Assignment -2			
		A Study of Personnel			
13	March (23-28)	Financial and Production MIS			

		SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	continue		
		continue		
		Introduction to E-Business Systems		

		SUNDAY - 05.04.2020		
15	April (06 -11)	Decision Support Systems-Support Systems and Planning		
		Ecommerce- Technologies and Applications		
		Contorl and Decision Making		

		SUNDAY - 12.04.2020		
16	April (13-18)	Group Discussion		
		Revision		
		Revision		
		Revision		
		Revision		
		Revision		

		SUNDAY - 19.04.2020		
17	April (20-25)	Revision		

		SUNDAY - 26.04.2020		
18	April (27-30)			

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Weekly Lesson Plan (January 2020 - April 2020)

Name of the Paper:-   RDBMS   **Class: BCA II SEM - 4**

Name of the Teachers (Section wise): Deepty juneja

WEEK	DATE	TOPICS
1	January (1 - 4)	Relational Model Concepts
		Codd's Rule for Relational Model
SUNDAY - 05.01.2020	
2	January (6-11)	
		Relational Algebra (Selection, Projection)
		Relational Algebra (Set Operators)
		Renaming,Join & Division
	SUNDAY - 12.01.2020	
3	January (13-18)	Introduction Ralational Calculas
		Tuple Relational Caculas
		Domain Relational Calculas
	SUNDAY - 19.01.2020	
4	January (20 -25)	Functional Dependencies & Introduction of Normal Forms
		Purpose of Normalization, Data Redundancy
		Update Anomalies,Functional Dpendancy
	January - 26.01.2020	
5	January (27- 31) February (1)	Partial/ Fully Functional Dependency
		Transitive functional Dependency, Characteristics of Functional Dependency
		Normal Forms(1NF)

		SUNDAY - 02.02.2020	
6	February (3 -8)	2NF	
		3NF	
		BCNF	
		Assignment I	
		SUNDAY - 09.02.2020	
7	February (10 -15)	Query Session	
		Conditional Test	
		SUNDAY - 16.02.2020	
8	February (17-22)	Introduction, definition& data types of SQL	
		SQL Operators,Constraint in SQL	
		DDl Commanda	
		SUNDAY - 23.02.2020	
9	February (24-29)	DML Commands	
		DCl Commands	
		SUNDAY - 01.03.2020	
10	March (02 -07)	Conditional Test	
		Simple & Nested Queries	
		Views	

SUNDAY - 08.03.2020		
11	March (09 -14)	**HOLI BREAK**
SUNDAY - 15.03.2020		
12	March (16 -21)	Indexes
		Aggregate functions,Clauses
SUNDAY - 22.03.2020		
13	March (23-28)	Basics of PL/SQl ,PL/SQL Architecture,PL/SQL SQL*Plus
		Advantage of PL/SQL,PL/SQL Block,Execution Statement
		PL/SQL Character set ,Data types, Declaration of variable, assignment of variable
SUNDAY - 29.03.2020		
14	March (30 -31) April 1-4)	Control Structure in PL/SQL
		Cursors
		Triggers

		SUNDAY - 05.04.2020		
15	April (06 -11)	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)			