I.B. (PG) COLLEGE, PANIPAT
SESSION 2021-2022 (11.04.2022 to 19.07.2022)

Weekly Lesson Plan (Even Semester)

Name of the Paper:-Advanced Data Structures   **Class: BCA-II(4th sem)**

Name of the Teachers (Section wise):Ashwani Gupta

WEEK	DATE	TOPICS
1	April (11-16)	Sorting: Internal & external sorting,
HOLIDAY - 14th APRIL (Dr. B.R. Ambedkar Jayanti /Mahavir Jayanti)		
SUNDAY - 17.04.2022		
2	April (18-23)	Radix sort, Quick sort, Heap sort, Merge sort, Tournament sort,
SUNDAY - 24.04.2022		
3	April (25-30)	Comparison of various sorting and searching algorithms on the basis of their complexity.
SUNDAY - 01.05.2021		
4	May (2, 4-7)	Files: Introduction Attributes of a file, Classification of files, Fileoperations,
HOLIDAY - 3rd May (ld-ul-Fitr / Parshuram Jayanti)		
SUNDAY - 08.05.2022		
5	May (9-14)	Comparison of various types of files, Sequential, Indexed-sequential, Random-access file. Hashing: Introduction, Collision resolution
SUNDAY - 15.05.2022		

6	**May (16-21)**	Graph: Introduction, Graph theory terminology, Sequential and linkedrepresentation of graphs, operations on graphs
	SUNDAY - 22.05.2022	
7	**May (23-28)**	traversal algorithms in graphs and their implementation, **First & Second Assignment**
	SUNDAY -29.05.2022	
8	**May (30-31) June (1, 3-4)**	Warshall's algorithm for shortest path, Dijkstra algorithm for shortest path.
	HOLIDAY - 02.06.2022 (Maharana Pratap Jayanti)	
	SUNDAY - 05.06.2022	
9	**June (6-11)**	Tree: Introduction, Definition, Traversing binary trees, Representing Binary tree in memory,
	SUNDAY - 12.06.2022	
10	**June (13, 15-18)**	Traversal algorithms using stacks, Searching, Insertion and deletion in a Binary search tree,
	HOLIDAY -14.06.2022 (Sant Kabir Jayanti)	
	SUNDAY - 19.06.2022	
11	**June (20-25)**	Traversal algorithms using stacks, Searching, Insertion and deletion in a Binary search tree,
	SUNDAY - 26.06.2022	

12	**June (27-30)** **July (1-2)**	
		Huffman's algorithm, General trees.
		Revision & Test
SUNDAY - 03.07.2022		
13	**July (4-9)**	
		Huffman's algorithm, General trees.
SUNDAY & HOLIDAY (ld-ul-Zuha (Bakr-ld) - 10.07.2022		
14	**July (11-16)**	
		Revision & Test
SUNDAY - 17.07.2022		
15	**July (18-19)**	Doubt Session
		Doubt Session
20.07.2022 - EXAMINATION ONWARDS		

I.B. (PG) COLLEGE, PANIPAT
SESSION 2021-2022 (11.04.2022 to 19.07.2022)

Weekly Lesson Plan (Even Semester)

Name of the Paper:- c++   Class: BCA II (4th sem)

Name of the Teachers (Section wise): PROF . VINAY BHARTI

WEEK	DATE	TOPICS
1	**April (11-16)**	Dynamic Polymorphism: Function Overriding Virtual Function and its Need Pure Virtual Function
HOLIDAY - 14th APRIL (Dr. B.R. Ambedkar Jayanti /Mahavir Jayanti)		
SUNDAY - 17.04.2022		
2	**April (18-23)**	Abstract Class, Virtual Derivation Virtual Destructor Type Conversion: Basic Type Conversion,
SUNDAY - 24.04.2022		
3	**April (25-30)**	Conversion between objects and basic types Conversion between objects of different classes, Inheritance: Rules of Derivations – Private, Protected and Public Derivations
SUNDAY - 01.05.2021		
4	**May (2, 4-7)**	Single Inheritance Multiple Inheritance Multi Level Inheritance
HOLIDAY - 3rd May (ld-ul-Fitr / Parshuram Jayanti)		
SUNDAY - 08.05.2022		
5	**May (9-14)**	Hierarchical Inheritance Multipath Inheritance Assignment 1
SUNDAY - 15.05.2022		

6	**May** **(16-21)**	Roles of Constructors and Destructors in Inheritance
		Query Session
		Conditional Test

SUNDAY - 22.05.2022	

7	**May** **(23-28)**	Genericity in C++
		Templates in C++
		Templates in C++

SUNDAY -29.05.2022	

8	**May** **(30-31)** **June** **(1, 3-4)**	Templates in C++
		Function templates.
		Function templates.

HOLIDAY - 02.06.2022 (Maharana Pratap Jayanti)	
SUNDAY - 05.06.2022	

9	**June (6-11)**	Assignment II
		Class templates in C++
		Exception Handling in C++: try, throw and catch

SUNDAY - 12.06.2022	

10	**June (13, 15-18)**	Exception Handling in C++: try, throw and catch
		Class templates in C++
		Revision

HOLIDAY -14.06.2022 (Sant Kabir Jayanti)	
SUNDAY - 19.06.2022	

11	**June (20-25)**	Files I/O in C++
		Files I/O in C++
		Class Hierarchy for Files I/O

SUNDAY - 26.06.2022	

12	June (27-30)	Text versus Binary Files
		Text versus Binary Files
	July (1-2)	Opening and Closing Files

	SUNDAY - 03.07.2022	

13	July (4-9)	File Pointers
		File Pointers
		revision

	SUNDAY & HOLIDAY (ld-ul-Zuha (Bakr-ld) - 10.07.2022	

14	July (11-16)	Operation on files
		Operation on files
		Revision

	SUNDAY - 17.07.2022	

| 15 | July (18-19) | Test |
| | | Test |

20.07.2022 - EXAMINATION ONWARDS

I.B. (PG) COLLEGE, PANIPAT
SESSION 2021-2022 (11.04.2022 to 19.07.2022)

Weekly Lesson Plan (Even Semester)

Name of the Paper:-COMPUTER-ORIENTED STATISTICAL METHODS   Class: BCA_II (4th sem)

Name of the Teachers (Section wise): Ashwani Gupta

WEEK	DATE	TOPICS
1	April (11-16)	Statistics: Preparing Frequency Distribution Table and Cumulative frequency,
HOLIDAY - 14th APRIL (Dr. B.R. Ambedkar Jayanti /Mahavir Jayanti)		
SUNDAY - 17.04.2022		
2	April (18-23)	Measure of Central Tendency, Types: Arithmetic mean, Geometric Mean, Harmonic Mean, — Median, Mode.
SUNDAY - 24.04.2022		
3	April (25-30)	Measure of Central Tendency, Types: Arithmetic mean, Geometric Mean, Harmonic Mean, — Median, Mode.
SUNDAY - 01.05.2021		
4	May (2, 4-7)	Measure of Dispersion: Range, Quartile Deviation, Coefficient of mean Deviation, Standard Deviation mean deviation,
HOLIDAY - 3rd May (ld-ul-Fitr / Parshuram Jayanti)		
SUNDAY - 08.05.2022		
5	May (9-14)	Moments : Moments About mean, Moments about any point, Moment about origin, Moment about mean in terms of moment about any point, Moment about any point in terms of Moment about mean
SUNDAY - 15.05.2022		

6	**May (16-21)**	Correlation: Introduction, Types, Properties, Methods of Correlation: Karl Pearson's Coefficient of Correlation, Rank Correlation and Concurrent Deviation method, Probable error.

SUNDAY - 22.05.2022

7	**May (23-28)**	Correlation: Introduction, Types, Properties, Methods of Correlation: Karl Pearson's Coefficient of Correlation, Rank Correlation and Concurrent Deviation method, Probable error.

SUNDAY -29.05.2022

8	**May (30-31) June (1, 3-4)**	Regression: Introduction, Aim of Regression Analysis, Types of Regression Analysis, Lines of Regression, Properties of Regression Coefficient and Regression Lines, Comparison with Correlation.

HOLIDAY - 02.06.2022 (Maharana Pratap Jayanti)
SUNDAY - 05.06.2022

9	**June (6-11)**	Curve Fitting: Straight Line, Parabolic curve, Geometric Curve and Exponential Curve
		Baye's Theorem in Decision Making, Forecasting Techniques

SUNDAY - 12.06.2022

10	**June (13, 15-18)**	Types: Binomial, Poisson, Normal Distribution, Mean and Variance of Binomial, Poisson, and Normal Distribution

HOLIDAY -14.06.2022 (Sant Kabir Jayanti)
SUNDAY - 19.06.2022

11	**June (20-25)**	Sample introduction, Sampling: Meaning, methods of Sampling, Statistical Inference: Test of Hypothesis, Types of hypothesis, Procedure of hypothesis Testing, Type I and Type II error, One Tailed and two tailed Test,

SUNDAY - 26.06.2022

12	June (27-30) July (1-2)	Types of test of Significance: Test of significance
		for Attribute-Test of No. of success and test of proportion of success,
		Test of significance for large samples - Test of significance for single
		mean and Difference of mean

SUNDAY - 03.07.2022

13	July (4-9)	Test of significance for small samples
		(t-test) – test the significance between the mean of a random sample,
		between the mean of two independent samples

SUNDAY & HOLIDAY (ld-ul-Zuha (Bakr-ld) - 10.07.2022

14	July (11-16)	Test of significance for small samples
		(t-test) – test the significance between the mean of a random sample,
		between the mean of two independent samples

SUNDAY - 17.07.2022

| 15 | July (18-19) | Revision & Test |
| | | Revision & Test |

20.07.2022 - EXAMINATION ONWARDS

I.B. (PG) COLLEGE, PANIPAT

SESSION 2021-2022 (11.04.2022 to 19.07.2022)

Weekly Lesson Plan (Even Semester)

Name of the Paper:-E commerce   **Class: BCA II (4th sem)**

Name of the Teachers (Section wise): Ritu Bhardwaj

WEEK	DATE	TOPICS
1	April (11-16)	
		Introduction to E-Commerce:-Business operations
		E-commerce practices vs. traditionalbusiness practices
HOLIDAY - 14th APRIL (Dr. B.R. Ambedkar Jayanti /Mahavir Jayanti)		
SUNDAY - 17.04.2022		
2	April (18-23)	
		concepts of b2b, b2c,c2c,b2g,g2h,g2c
		Features of E-Commerce
		Types of Ecommerce Systems
SUNDAY - 24.04.2022		
3	April (25-30)	
		Elements of E-Commerce
		principles of E-Commerce,
		Benefits and Limitations of E-Commerce
SUNDAY - 01.05.2021		
4	May (2, 4-7)	
		Management Issues relating to e-commerce
		Operations of E-commerce: Credit cardtransaction
HOLIDAY - 3rd May (ld-ul-Fitr / Parshuram Jayanti)		
SUNDAY - 08.05.2022		
5	May (9-14)	
		Secure Hypertext Transfer Protocol (SHTP)
		Test
		Electronic payment systems
SUNDAY - 15.05.2022		

6	**May (16-21)**	
		Secure electronic transaction (SET); SET`s encryption; Process; Cybercash; Smart cards;
		Indian payment models
		Applications in governance: EDI in governance

SUNDAY - 22.05.2022		

7	**May (23-28)**	
		E-government; E-Governanceapplications of Internet
		concept of government –to- business, business-to-governmentand citizen-to-government
		E-governance models; Private sector interface in Egovernance

SUNDAY -29.05.2022		

8	**May (30-31) June (1, 3-4)**	
		Applications in B2C
		Consumers shopping procedure on the Internet

HOLIDAY - 02.06.2022 (Maharana Pratap Jayanti)		
SUNDAY - 05.06.2022		

9	**June (6-11)**	
		Impacton disinter mediation and re-intermediation
		Global market; Strategy of traditionaldepartment stores.
		Test

SUNDAY - 12.06.2022		

10	**June (13, 15-18)**	
		Query Session
		Assignment 2
		RDO

HOLIDAY -14.06.2022 (Sant Kabir Jayanti)		
SUNDAY - 19.06.2022		

11	**June (20-25)**	
		Products in b2c model; success factors of e-brokers
		Broker-based services on-line
		Online travel tourism services; Benefits and impact of e-commerce on travel industry; Deal estate market

SUNDAY - 26.06.2022		

12	June (27-30) July (1-2)	
		Online travel tourism services; Benefits and impact of e-commerce on travel industry; Deal estate market
		Applications in B2B: Key technologies for b2b; architectural models of b2b
		characteristics of the supplier –oriented marketplace
SUNDAY - 03.07.2022		
13	July (4-9)	
		buyer-oriented marketplace andintermediary-oriented marketplace
		Just In Time delivery in b2b
		Internet-based EDI from traditional EDI, Marketing Issues in b2b.
SUNDAY & HOLIDAY (ld-ul-Zuha (Bakr-ld) - 10.07.2022		
14	July (11-16)	
		Emerging models in India, Internet & E-Commerce scenario in India; Internet security Issues; Legal aspects of E-commerce
		Revision
SUNDAY - 17.07.2022		
15	July (18-19)	
20.07.2022 - EXAMINATION ONWARDS		

I.B. (PG) COLLEGE, PANIPAT

SESSION 2021-2022 (11.04.2022 to 19.07.2022)

Weekly Lesson Plan (Even Semester)

UG   (2nd / 4th / 6th Semester)   &   PG (2nd / 4th)

Name of the Paper:-_RDBMS   Class: BCA-II (4th Sem)

Name of the Teachers (Section wise): _Mohit Dhiman

WEEK	DATE	TOPICS
1	April (11-16)	Relational Model concepts,
		continue...
		Codd's Rule for Relational Model,
		Relational Algebra: Selection and Projection,
		continue...
		HOLIDAY - 14th APRIL (Dr. B.R. Ambedkar Jayanti /Mahavir Jayanti)
		SUNDAY - 17.04.2022
2	April (18-23)	Set operation, Renaming,
		continue...
		Join and Division,
		continue...
		Relational Calculus: Tuple Relational calculus
		continue...
		SUNDAY - 24.04.2022
3	April (25-30)	Domain Relational Calculus.
		continue...
		continue...
		Revise
		Functional Dependencies and Normalization : Purpose,
		Data Redundancy,
		SUNDAY - 01.05.2021
4	May (2, 4-7)	continue...
		continue...
		update Anomalies,
		continue...
		continue...
		HOLIDAY - 3rd May (ld-ul-Fitr / Parshuram Jayanti)
		SUNDAY - 08.05.2022
5	May (9-14)	Revise
		Functional Dependencies : Full Functional Dependencies,
		continue...
		continue...
		Transitive Functional Dependencies,
		continue...
		SUNDAY - 15.05.2022

6	**May (16-21)**	continue…
		Characteristics of Functional Dependencies,
		continue…
		continue…
		Decomposition and Normal Forms - 1NF
		continue…
	**SUNDAY - 22.05.2022**	
7	**May (23-28)**	continue…
		2NF
		continue…
		continue…
		3NF & BCNF
		continue…
	**SUNDAY -29.05.2022**	
8	**May (30-31) June (1, 3-4)**	continue…
		SQL : Data defination and data types,
		continue…
		SQL Operators,
		continue…
	**HOLIDAY - 02.06.2022 (Maharana Pratap Jayanti)**	
	**SUNDAY - 05.06.2022**	
9	**June (6-11)**	Specifying Constraints in SqL,
		continue…
		Basic DDL,
		continue…
		DML and DCL commands in SQL,
		continue…
	**SUNDAY - 12.06.2022**	
10	**June (13, 15-18)**	continue…
		Simple Queries,
		Nested Queries,
		Tables,
		Views,Indexes,
	**HOLIDAY -14.06.2022 (Sant Kabir Jayanti)**	
	**SUNDAY - 19.06.2022**	
11	**June (20-25)**	continue…
		continue…
		Aggregate Functions,
		continue…
		Clauses.
		Revise
	**SUNDAY - 26.06.2022**	

12	**June (27-30)**	PL/SQL architecture,
		PL/SQL and SQL*Pluse,
		PL/Sql Basics,
		Adavantages of PL/Sql,
	July (1-2)	The Generic PL/Sql Block : Pl/Sql execution environment,
		PL/Sql Character set and Data types,
	**SUNDAY - 03.07.2022**	
13		continue…
		continue…
		Cursors Structure in PL/Sql,
		Cursors in PL/Sql,
	July (4-9)	continue…
		Revise
	**SUNDAY & HOLIDAY (ld-ul-Zuha (Bakr-ld) - 10.07.2022**	
14		
		Triggers in PL/Sql,
		continue…
		continue…
	July (11-16)	Programming using PL/Sql
		continue…
	**SUNDAY - 17.07.2022**	
15	**July (18-19)**	continue…
		Revise
	**20.07.2022 - EXAMINATION ONWARDS**	