LECTURE PLAN (2024-25) BCA SEMESTER – II

LECTURE PLAN

Faculty Name- Amrita Keshari

Course Name: Business Communication Course Code: BCA-24-201 Sec- A

	Lecture Plan							
Mon th	UNIT	Week	LP No.	Торіс				
F Ist B		2 nd	2	INTRODUCTION Process and Importance of Communication, Types of Communication (verbal &Non-Verbal), Different forms of Communication. Barriers to Communication:				
		3 rd	2	Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers.				
		4 th	3	Role, effects and advantages of technology in Business Communication like email, text messaging, instant messaging and modern techniques like video conferencing, social networking.				
		5 th	2	Strategic importance of ecommunication.				
		2 nd	3	NON-VERBAL ASPECTS OF COMMUNICATING: Body Language, Kinesics, Proxemics,				
		3 rd	3	Paralanguage. Effective Listening				
		4 th	3	Principles of Effective listening, Factors affecting listening exercises, Oral, Written and video sessions, Interviewing skills: Appearing in interviews, Writing resume and letter of application.				
		5 th	3	Modern forms of communicating: E-Mail, Video Conferencing etc.				
	III rd & IV th	1 st	2	BUSINESS LANGUAGE AND PRESENTATION: Importance of Business language, Vocabulary Words often confused Words often misspelt,				
		2 nd	3	Common errors in English. Oral Presentation				
Α		3 RD	2	Importance, Characteristics, Presentation Plan, Power point presentation, Visual aids.				
P R		4 th	3	WRITING SKILLS: Planning business messages, Rewriting and editing, the first draft and reconstructing the final draft.				
l L		5 th	3	OFFICE CORRESPONDENCE: Official Letter, Semi Official Letter and Memorandum. REPORT WRITING Identify the types of reports, define the basic format of a report,				
		2 nd	3	identify the steps of report writing, write a report meeting the format requirements, determine the process of writing a report, importance of including visuals such as tables, diagrams and charts in writing report, apply citation rules (APA style documentation) in reports.				
Total		Planne	ed: 42					

- 1. Lesikar, R.V. & Flatley, M.E.; Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
- 2. Bovee, and Thill, Business Communication Today, Pearson Education
- 3 Shirley, Taylor, Communication for Business, Pearson Education
- 4. Locker and Kaczmarek, Business Communication: Building Critical Skills, TMH

Faculty Name- Dr. Anshuman Bhattacharya

Course Name: Business Communication Course Code: BCA-24-201 Sec- B

				Lecture Plan	
Mon th	UNIT	Week	LP No.	Topic	
		2 _{nd}	3	Process and Importance of Communication, Types of Communication (verbal &Non-Verbal), Different forms of Communication.	
F E	I	3rd	3	Barriers to Communication: Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers.	
В		4th	3	Role, effects and advantages of technology in Business Communication like email, text messaging, instant messaging and modern techniques like video conferencing, social networking.	
		5 _{th}	3	Strategic importance of e-communication.	
		1st	3	NON-VERBAL ASPECTS OF COMMUNICATING: Body Language, Kinesics, Proxemics, Paralanguage	
M A R		2 _{nd}	3	Effective Listening: Principles of Effective listening, Factors affecting listening exercises	
C	II	3rd	3	Oral, Written and video sessions	
Н		4th	3	Interviewing skills: Appearing in interviews, Writing resume and letter of application	
		5 _{th}	3	Modern forms of communicating: E-Mail, Video Conferencing etc.	
		1 _{st}	3	BUSINESS LANGUAGE AND PRESENTATION: Importance of Business language, Vocabulary Words often confused Words often misspelt, Common errors in English	
A	III	III 2 _{nd}		Oral Presentation Importance, Characteristics, Presentation Plan, Power point presentation, Visual aids.	
P R I		3rd	3	WRITING SKILLS: Planning business messages, Rewriting and editing, the first draft and reconstructing the final draft.	
Ĺ		4th 3		OFFICE CORRESPONDENCE: Official Letter, Semi Official Letter and Memorandum	
	5th		3	REPORT WRITING: Identify the types of reports, define the basic format of a report, identify the steps of report writing, write a report meeting the format requirements	
M A	IV	IV 1st		Determine the process of writing a report, importance of including visuals such as tables, diagrams and charts in writing report,	
Υ		2 _{nd}	3	Apply citation rules (APA style documentation) in reports; Revision	
То	tal			Planned: 48	

- 1. Lesikar, R.V. & Flatley, M.E.; Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
- 2. Bovee, and Thill, Business Communication Today, Pearson Education 3 Shirley, Taylor, Communication for Business, Pearson Education
- 4. Locker and Kaczmarek, Business Communication: Building Critical Skills, TMH

Course Name: Discrete Math

Course Code: BCA-24-202 Sec - A & B

Faculty Name: Mr. Abhishek Sharma

			Le	cture Plan
Month	UNIT	Week	No. of Planned Lecture	Topic
		2 nd	2	Sets and Elements, Equality of Sets, Subsets,
		3 rd	5	Set operations, Venn Diagrams & Set operations,
F E		4 th	6	Fundamentals products, Algebra of Sets, Duality, Finite Sets, Counting Principles, Classes of Sets, Induction, Symmetric Difference.
В		5 th	4	Relations, Representation of Relations, Compositions of Relations, Types of Relations, Equivalence Relations, Partial Ordering Relation, Functions: Function, Mapping, Real valued, Composition, One to One, Onto, Invertible, and the Cardinality of a set.
		1 st	1	Statements and Notation,
M		2 nd	6	Connectives, Negation, Conjunction, Disjunction, Statement formulas and Truth tables. Conditional and Biconditional, Tautologies, Contradictions, 'FF,
A R	II and III	3 rd	3	Equivalence of formulae, Duality saw, Two state Devices and Statement. Logic. Normal forms, Disjunctive Normal Forms, Conjunctive Normal forms.
		4 th	6	Predicate Logic: Theory of Predicates, First order predicate, Predicate formulas,
		5 th	6	Quantifiers, Inference theory of predicate logic.
		1 st	5	Posets, Hasse Diagram and Lattices: Introduction, Partial ordered sets, Combination of Partial ordered sets
		2 nd	5	Hasse diagram, Introduction of lattices, Properties of lattices – Bounded, Complemented, Modular and Complete lattice.
A P R	III and IV	3 rd	4	Basic component of Graph: Basic of graph, Pseudograph, Multigraph, Simple graph, Bipartite graph and Complete Biparitite graph, Hand shaking Lemma, Sub graph,
		4 th	6	Operations on graph, Walk path and Circuits and their properties, Shortest path Problem. Unicursal and eulerian graph,
		5 th	3	Randomly Eulerian graph, Fleury's Algorithm, Chinese Postman Problem, Hamiltonian graph, Necessary and sufficient conditions, Travelling Salesman problem.
М	V and	1 st	3	Fundamental principles of counting, Permutations and combinations, Binomial theorem combinations with

Α	I			repetition, Combinatorial numbers, Principle of inclusion
Υ				and exclusion —Derangements — Arrangements with
				forbidden positions.
		2 nd	6	Generating functions Partitions of integers — Exponential generating function — Summation operator Recurrence relations — First order and second order — non-homogeneous recurrence relations — Method of generating functions
Total Clas	sses	Planned:	71	

Reference Books:

- 1. B.S. Grewal, "Elementary Engineering Mathematics", 34th Ed., 1998.
- 2. Seymour Lipschutz, "Discrete Mathematics" Mcgraw-Hill Education (Publication)

LECTURE PLAN (2024-25) BCA-II Semester (Section A and B)

Course Name: Data structure using C **Course Code:** BCA-24-203T

Teacher Name: Daya Shankar Singh

Month	Week	No. of Planned Lecture	Topic
	2 nd	2	UNIT-I Introduction to Data Structure and its Characteristics Array Representation of single and multidimensional arrays;
	3 rd	3	Sparse arrays lower and upper triangular matrices Tridiagonal matrices with Vector Representation
	4 th	4	Stacks and Queues Stacks Introduction and primitive operations on stack Queue Introduction and primitive operations on Queue D- queues and priority queues
	5 th	3	Infix, postfix, prefix expressions; Evaluation of postfix expression; Conversion between prefix, infix and postfix
	1 st	1	UNIT-II Lists Introduction to linked lists;
Mar	2 nd	4	Sequential and linked list operations such as traversal, insertion, deletion, searching
	3 rd	2	do
	4 th	4	Doubly linked list operations such as traversal, insertion, deletion, searching
	5 th	4	Stack and Queue using linked list.
Apr	1 st	3	UNIT-III Trees

			Introduction and terminology; BST insertion
	2 nd	4	Traversal of binary trees, Deletion and Binary Search
	3 rd	3	UNIT-IV B-Trees Introduction, The invention of B-Tree; Statement of the problem; Indexing with binary search trees;
	4 th	4	a better approach to tree indexes; B-Trees; working up from the bottom; Example for creating a B-Tree
	5 th	2	do
May	1 st	2	Sorting Techniques; Insertion sort, selection sort,
	2 nd	4	merge sort, heap sort, searching Techniques: linear search, binary search, Hashing technique

Total: 49

- 1. E.Horowitz and S.Sahani, "Fundamentals of Data structures", Galgotia Book source Pvt. Ltd., 2003
- 2. R.S.Salaria, "Data Structures & Algorithms", Khanna Book Publishing Co. (P) Ltd..,2002
- 3. Y.Langsam et. Al., "Data Structures using C and C++", PHI, 1999

LECTURE PLAN (2024-25) BCA-II Semester (Section-A)

Course Name: Data Structure Lab Course Code: BCA-24-203P

Teacher Name: Daya Shankar Singh

Month	Week	No. of Planned Lecture	Topic
	1 st		
	2 nd	4	UNIT-I Programs: I/O in matrix, addition and multiplication of matrices
Feb	3 rd	3	Programs: I/O in sparse matrix, addition and multiplication of matrices Programs: I/O in lower and upper triangular matrices
	4 th	4	Programs related to primitive operations on stack Programs related to primitive operations on Queue
	5 th	2	Program for evaluation of postfix expression
	1 st	1	UNIT-II Programs related to primitive operations on Linked List Add,
	2 nd	4	Delete nodes to/from linked list, Traversal of linked list
Mar	3 rd	1	do
	4 th	4	Programs related to primitive operations on Doubly Linked List
	5 th	4	Stack and Queue using linked list
	1 st	4	UNIT-III Programs related to primitive operations on BST: Add Node in BST
Apr	2 nd	3	BST Traversal
Zhi	3 rd	3	Delete Node from BST
	4 th	4	Interactive program to perform various operations on BST.
	5 th	1	do
	1 st	3	UNIT-IV Programs: sequential search and binary search
May	2 nd	4	Programs: Bubble sort, selection sort, Insertion sort, Programs: Merge sort, heap sort
	3 rd		
	4 th		
	5 th		

Total: 49

LECTURE PLAN (2024-25) BCA-II Semester (Section-B)

Course Name: Data Structure Lab Course Code: BCA-24-203P

Teacher Name: Daya Shankar Singh

Month	Week	No. of Planned Lecture	Topic
	1 st		
	2 nd	3	UNIT-I Programs: I/O in matrix, addition and multiplication of matrices
Feb	3 rd	3	Programs: I/O in sparse matrix, addition and multiplication of matrices Programs: I/O in lower and upper triangular matrices
	4 th	4	Programs related to primitive operations on stack Programs related to primitive operations on Queue
	5 th	3	Program for evaluation of postfix expression
	1 st	0	
	2 nd	4	UNIT-II Programs related to primitive operations on Linked List Add, Delete nodes to/from linked list, Traversal of linked list
Mar	3 rd	3	do
	4 th	4	Programs related to primitive operations on Doubly Linked List
	5 th	4	Stack and Queue using linked list
	1 st	3	UNIT-III Programs related to primitive operations on BST: Add Node in BST
Apr	2 nd	3	BST Traversal
, .p.	3 rd	3	Delete Node from BST
	4 th	4	Interactive program to perform various operations on BST.
	5 th	3	do
	1 st	1	UNIT-IV Programs: sequential search and binary search
May	2 nd	4	Programs: Bubble sort, selection sort, Insertion sort Programs: Merge sort, heap sort
	3 rd		
	4 th		
	5 th		

Total: 49

Course Name: Organization Behavior

Course Code: BCA-24-204ME1 Section: -A

Faculty Name: Ms. Suman Mishra Tiwari

				Lecture Plan
Month	UNIT	Week	No. of Planned Lecture	Торіс
		1 st		
		2 nd	2	Fundamentals of Organizational Behaviour, Nature, Scope
Feb	1&11	3 rd	4	Definition and Goals of Organizational Behaviour; Fundamental Concepts of Organizational Behaviour;
		4 th	4	Models of Organizational Behaviour; Emerging aspects of Organizational Behaviour.
		5 th	3	Perception, Attitude, Values and Motivation
		1 st	1	Concept, Nature, Process, Importance,
March	Ш	2 nd	4	Management Behavioural aspect of Perception. Effects of employee attitudes; Personal and Organizational Values
		3 rd	2	Job Satisfaction; Nature and Importance of Motivation;
		4 th	4	Achievement Motive; Theories of Work Motivation: Maslow's Need Hierarchy Theory
		5 th	4	McGregor's Theory 'X' and Theory 'Y'
		1 st	3	Personality, Definition of Personality,
April	III&IV	2 nd	4	Determinants of Personality; Theories of Personality- Trait and Type Theories
		3 rd	2	TheBig Five Traits.
		4 th	4	Work Stress, Meaning and definition of Stress, Symptoms of Stress; Sources of Stress, Individual Level, Group Level, Organizational Level;
		5 th	2	Stress Management – Individual Strategies, Organizational Strategies; Employee Counselling. Group Behavior and Leadership, Nature of Group, Types of Groups
May	V&VI	1 st	1	Nature and Characteristics of team; Team Building, Effective Teamwork; Nature of Leadership, Leadership Styles; Traits of Effective Leaders
		2 nd	2	Conflict in Organizations, Nature of Conflict, Process of Conflict; Levels of Conflict – Intrapersonal, Interpersonal; Sources of Conflict. Effect of Conflict; Conflict Resolution, Meaning and types of Grievances & Process of Grievances Handling.
Total Clas	ses	Planned	d:46	

- 1. Organizational Behavior Text, Cases and Games- By K.Aswathappa, Himalaya Publishing House, Mumbai, Sixth Edition (2005)
- 2. Organizational Behavior Human Behavior at Work By J.W. Newstrom, Tata McGraw Hill Publishin Company Limited, New Delhi, 12th Edition (2007)
- 3. Organizational Behavior By Fred Luthans
- 4. Organizational Behavior By Super Robbins
- 5. Organizational Behavior Anjali Ghanekar
- 6. Organizational Behavior Fundamentals, Realities and Challenges By Detra Nelson, James Campbel : Quick Thomson Publications
- 7. Organizational Behavior through Indian Philosophy, By N.M.Mishra, Himalaya Publication House

Course Name: Organization Behavior

Course Code: BCA-24-204ME1 Section: B Faculty Name: Ms. Suman Mishra Tiwari

				Lecture Plan
Month	UNIT	Week	No. of Planned Lecture	Торіс
		1 st		
		2 nd	2	Fundamentals of Organizational Behaviour, Nature, Scope
Feb	1&11	3 rd	3	Definition and Goals of Organizational Behaviour; Fundamental Concepts of Organizational Behaviour;
		4 th	4	Models of Organizational Behaviour; Emerging aspects of Organizational Behaviour.
		5 th	2	Perception, Attitude, Values and Motivation
		1 st	1	Concept, Nature, Process, Importance,
March	II	2 nd	4	Management Behavioural aspect of Perception. Effects of employee attitudes; Personal and Organizational Values
		3 rd	1	Job Satisfaction; Nature and Importance of Motivation;
		4 th	4	Achievement Motive; Theories of Work Motivation: Maslow's Need Hierarchy Theory
		5 th	4	McGregor's Theory 'X' and Theory 'Y'
		1 st	4	Personality, Definition of Personality,
April	III&IV	2 nd	3	Determinants of Personality; Theories of Personality- Trait and Type Theories
		3 rd	3	TheBig Five Traits.
		4 th	4	Work Stress, Meaning and definition of Stress, Symptoms of Stress; Sources of Stress, Individual Level, Group Level, Organizational Level; Stress Management – Individual Strategies, Organizational Strategies; Employee Counselling
		5 th	1	Group Behaviour and Leadership, Nature of Group, Types of Groups
May	V&VI	1 st	3	Nature and Characteristics of team; Team Building, Effective Teamwork; Nature of Leadership, Leadership Styles; Traits of Effective Leaders
		2 nd	4	Conflict in Organizations, Nature of Conflict, Process of Conflict; Levels of Conflict – Intrapersonal, Interpersonal; Sources of Conflict. Effect of Conflict; Conflict Resolution, Meaning and types of Grievances & Process of Grievances Handling.
Total Classes		Planned	1:47	

- 1. Organizational Behavior Text, Cases and Games- By K.Aswathappa, Himalaya Publishing House, Mumbai, Sixth Edition (2005)
- 2. Organizational Behavior Human Behavior at Work By J.W. Newstrom, Tata McGraw Hill Publishin Company Limited, New Delhi, 12th Edition (2007)
- 3. Organizational Behavior By Fred Luthans
- 4. Organizational Behavior By Super Robbins
- 5. Organizational Behavior Anjali Ghanekar
- 6. Organizational Behavior Fundamentals, Realities and Challenges By Detra Nelson, James Campbel : Quick Thomson Publications
- 7. Organizational Behavior through Indian Philosophy, By N.M.Mishra, Himalaya Publication House

LECTURE PLAN Course Name: Web Designing

Course Code: BCA-24-205VC Section: A

Faculty Name: Ms. Anita Shah

				Lecture Plan
Month	UNIT	Week	No. of Planned Lecture	Торіс
_		2 nd	1	OVERVIEW OF INTERNET: Introduction to internet and www ,internet protocols like TCP/IP, http, telnet and ftp
F		3 rd	2	URL, email, domain name, Web Browsers,
E	l	4 th	3	Search Engines, counters, chat &Bulletin Board services
В		5 th	2	INTRODUCTION TO HTML: History and evolution of HTML, Differences between HTML Versions
		1 st	-	BASIC STRUCTURE OF AN HTML DOCUMENT: DOCTYPE declaration, HTML, Head, and Body elements
		2 nd	3	Meta tags, Essential Tags, Tags and Attributes, Text Styles and Text Arrangements,
M A	II	3 rd	1	Text, Effects, Color and Background of Web Rages, Lists and their Types
R		4 th	3	Attributes of Image Tag & Hypertext, Hyperlink and Hypermedia, Links, Creating Table.
		5 th	3	HTML5 ELEMENTS AND ATTRIBUTES: HTML Semantic Elements(<header>, <footer>, <article>, <section>, <aside>, <nav>),</nav></aside></section></article></footer></header>
		1 st	3	Global Attributes(class, id, data-*, style, title), Content Models(Block-level elements vs Inline elements,
	III	2 nd	2	Text-level semantics: , , <mark>,<time>),</time></mark>
Α		3 rd	2	HTML Forms(Form Elements and Attributes <form>, <input/>, <textarea>, <button>, <select>, <option></td></tr><tr><td>P
R</td><td rowspan=2>IV</td><td>4<sup>th</sup></td><td>3</td><td>New Input Types: email, url, date, range, color) and Form Validation.</td></tr><tr><td></td><td>5<sup>th</sup></td><td>1</td><td>INTRODUCTION TO CSS: History and evolution of CSS, Basic Syntax and Structure (CSS ruleset: selectors, properties, and values Inline, internal, external CSS, the cascade and inheritance)</td></tr><tr><td>M</td><td rowspan=2>IV</td><td>1<sup>st</sup></td><td>2</td><td>Selectors and Combinators, The Box Model and Layout,
Responsive Design and Media Queries, Typography and
Fonts, Colors, Backgrounds, and Gradients and Transitions,
Transforms, and Animations.</td></tr><tr><td>A
Y</td><td>2<sup>nd</sup></td><td>3</td><td>INTRODUCTION TO JAVASCRIPT: Basic Syntax and Structure, Control Structures, Functions and Scope, Objects and Arrays, The Document Object Model (DOM), Advanced JavaScript Concepts (Asynchronous JavaScript & Error Handling), JavaScript in the Browser APIs. Introduction to jQuery and Bootstrap.</td></tr></tbody></table></textarea></form>

Total Planned Lectures: 34

- 1. "HTML and CSS: Design and Build Websites" by Jon Duckett.
- 2. "Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics" by Jennifer Robbins
- 3 Bootstrap 4 Quick Start: Responsive Web Development with HTML5, CSS3, and JavaScript" by Jacob Lett

LECTURE PLAN (2024-25) Course Name: Web Designing

Course Code: BCA-24-205VC Section: B

Faculty Name: Ms. Anita Shah

				Lecture Plan
Month	UNIT	Week	No. of Planned Lecture	Topic
_		2 nd	2	OVERVIEW OF INTERNET: Introduction to internet and www ,internet protocols like TCP/IP, http, telnet and ftp
F	_	3 rd	2	URL, email, domain name, Web Browsers,
E	l	4 th	3	Search Engines, counters, chat &Bulletin Board services
В		5 th	2	INTRODUCTION TO HTML: History and evolution of HTML, Differences between HTML Versions
		1 st	-	BASIC STRUCTURE OF AN HTML DOCUMENT: DOCTYPE declaration, HTML, Head, and Body elements
		2 nd	3	Meta tags, Essential Tags, Tags and Attributes, Text Styles and Text Arrangements,
M A	II	3 rd	3	Text, Effects, Color and Background of Web Rages, Lists and their Types
R		4 th	3	Attributes of Image Tag & Hypertext, Hyperlink and Hypermedia, Links, Creating Table.
		5 th	3	HTML5 ELEMENTS AND ATTRIBUTES: HTML Semantic Elements(<header>, <footer>, <article>, <section>, <aside>, <nav>),</nav></aside></section></article></footer></header>
		1 st	2	Global Attributes(class, id, data-*, style, title), Content Models(Block-level elements vs Inline elements,
		2 nd	3	Text-level semantics: , , <mark>, <time>),</time></mark>
		3 rd	2	HTML Forms(Form Elements and Attributes <form>, <input/>, <textarea>, <button>, <select>, <option></td></tr><tr><td>A
P</td><td>Ш</td><td>4<sup>th</sup></td><td>3</td><td>New Input Types: email, url, date, range, color) and Form Validation. INTRODUCTION TO CSS: History and evolution of CSS, Basic Syntax and Structure (CSS ruleset: selectors, properties, and values Inline, internal, external CSS, the cascade and inheritance)</td></tr><tr><td>R</td><td>IV</td><td>5<sup>th</sup></td><td>3</td><td>Selectors and Combinators, The Box Model and Layout, Responsive Design and Media Queries, Typography and Fonts, Colors, Backgrounds, and Gradients and Transitions, Transforms, and Animations</td></tr><tr><td>Total Plann</td><td>ed Lecture</td><td>2<sup>nd</sup></td><td>3</td><td>. INTRODUCTION TO JAVASCRIPT: Basic Syntax and Structure, Control Structures, Functions and Scope, Objects and Arrays, The Document Object Model (DOM), Advanced JavaScript Concepts (Asynchronous JavaScript & Error Handling), JavaScript in the Browser APIs. Introduction to jQuery and Bootstrap.</td></tr></tbody></table></textarea></form>

- 1. "HTML and CSS: Design and Build Websites" by Jon Duckett.
- 2. "Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics" by Jennifer Robbins
- 3 Bootstrap 4 Quick Start: Responsive Web Development with HTML5, CSS3, and JavaScript" by Jacob Lett