

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/TEACHING PLAN (BA & BCOM 1<sup>st</sup> YEAR)  
SESSION 2020-2021  
ENG CE 101  
English -1 Core English Compulsory

MONTH	UNIT/TOPIC	WEEK	DAY	CLASSTEST/ ASSIGNMENT (D=Day)	GROUP DISCUSSION/ READING SKILL/ PRESENTATION (D=Day)
JULY	<b>Syllabus Introduction/ Pattern of Testing</b>	1 <sup>st</sup> Week	1		
	<b>Unit- 1 (Poetry: Overview)</b>	1 <sup>st</sup> Week	2		
	Ozymandias	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	3 1		
	Blow, Blow, Thou Winter Wind	2 <sup>nd</sup> week	2-3		
	Discussion on Questions	3 <sup>rd</sup> Week	1		
		3 <sup>rd</sup> week		2-3 (d)	
		4 <sup>th</sup> week			1-3 (d)
	Good Morrow	5 <sup>th</sup> Week	1-3		
AUGUST	The Man He Killed	1 <sup>st</sup> Week	1-2		
	Discussion on Questions	1 <sup>st</sup> Week	3		
	Lines Written in Early Spring	2 <sup>nd</sup> Week	1-2		
		2 <sup>nd</sup> Week	3		3 (d)
	Questions	3 <sup>rd</sup> Week	1	2	3
	<b>Unit II( Short Stories &amp; Essays: Overview)</b>				
	The Parrot in the Cage	4 <sup>th</sup> Week	1-3		
	Discussion on Questions	5 <sup>th</sup> Week	1		
	5 <sup>th</sup> Week			2-3 (d)	
SEPTEMBER	Dinner for the Boss	1 <sup>st</sup> Week	1-3		
	The Redding Tree	2 <sup>nd</sup> Week	1-3		
		3 <sup>rd</sup> Week	1-3		1-3 (d)
		4 <sup>th</sup> Week	1-3		
	Discussion on Questions	5 <sup>th</sup> Week	1	3 (d)	2
OCTOBER	At the Himalayas	1 <sup>st</sup> Week	1-3		
	Value of Silence	2 <sup>nd</sup> Week	1-3		
	Questions	3 <sup>rd</sup> Week	1-3		
		4 <sup>th</sup> Week		3 (d)	1-2
		5 <sup>th</sup> week			Diwali Break

<b>NOVEMBER</b>		<b>1<sup>st</sup> Week</b>			
	Unit III (Applied Grammar) The use of Articles	2nd Week	1-3		
		3 <sup>rd</sup> Week		3 (d)	1-2
	The Use of Prepositions	4th Week	1-3		
		5 <sup>th</sup> Week	1-3		
<b>DECEMBER</b>	House Test	1 <sup>st</sup> Week			
	Verb Forms	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	1-3 1-3		
		4 <sup>th</sup> Week		1 (d)	
	Phrasal Verbs	4th Week 5 <sup>th</sup> Week	2-3		
<b>FEBRUARY</b>		2 <sup>nd</sup> Week		3 (d)	1-2
	Comprehension	3 <sup>rd</sup> Week	1-3		
		4 <sup>th</sup> Week			1-3 (d)
<b>MARCH</b>		1 <sup>st</sup> Week 2 <sup>nd</sup> Week			1-3 (d)

DEPARTARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 1<sup>st</sup> YEAR)  
SESSION 2020-21  
DSC-1A[ENG DSC 102]  
English Literature-1 (Essays, Stories and poems)

MONTH	UNIT/TOPIC	WEEK	DAY
<b>JULY</b>	Syllabus Introduction/ Pattern of Testing	1 <sup>st</sup> Week	1
	<b>Unit- 1 (Caste/Class: Overview)</b>	1 <sup>st</sup> Week	2
	Deliverance	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	3 1-2
	Joothan	2 <sup>nd</sup>	
		2 <sup>nd</sup> Week 3 <sup>rd</sup> week	3 1
	Kallu	3 <sup>rd</sup> Week	2-3
	Bossom Friend	4 <sup>th</sup> week	1-2
	Class Test/Assignment	4th Week	3
	GroupDiscussion/Speaking Skill/Presentation	5 <sup>th</sup> Week	1-3
<b>AUGUST</b>	<b>Unit -II (Gender: Overview)</b>	1 <sup>st</sup> Week	1
	Girl		2
	A Prayer for my Daughter	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	3 1-3
	Yellow Fish	3 <sup>rd</sup> Week	1

	Reincarnation of Captain Cook		2-3
	Highway Stripper	4 <sup>th</sup> Week	1-2
	Discussion on questions	4 <sup>th</sup> Week	3
		5 <sup>th</sup> Week	1-2
	CLASS TEST/ASSIGNMENT	5 <sup>th</sup> Week	3
SEPTEMBER	<b>Unit – III (Race: Overview)</b>	1 <sup>st</sup> Week	1
	Blackout	1st Week	2
	Telephone Conversation	1st Week	3
	Harlem	2 <sup>nd</sup> Week	1
	Still I Rise	2nd Week	2-3
	Discussion on Questions	3 <sup>rd</sup> Week	1-2
	Class Test/Assignment	3rd Week	3
	GroupDiscussion/Speaking Skill/Presentation	4 <sup>th</sup> Week	1-3
OCTOBER	GroupDiscussion/Speaking Skill/Presentation	5 <sup>th</sup> Week	1
	Unit IV (Violence and War: Overview)	1 <sup>st</sup> Week	1
	Conscientious Objector	1st Week	2
	General, Your Tank is a Powerful Vehicle	1st Week	3
	The Dogs of Tetwal	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	1-3 1
	A Chronicle of the Peacocks	3 <sup>rd</sup> Week 4 <sup>th</sup> week	2-3 1-2
	Discussion on Questions	4 <sup>th</sup>	3
	NOVEMBER	Class Test/Assignment	2nd Week
Ghosts of Mrs. Gandhi		3 <sup>rd</sup> Week	1-3
GroupDiscussion/Speaking Skill/Presentation		4 <sup>th</sup> Week	1-3
Discussion on Questions		5 <sup>th</sup> Week	1-3
DECEMBER	House Test	1 <sup>st</sup> Week	
	<b>Unit V (Living in a Globalized World: Overview)</b>	2 <sup>nd</sup> Week	1
	Toys	2 <sup>nd</sup> Week	3-2
	Indian Movie, New Jersey	3 <sup>rd</sup> Week	1-2
	Class Test/Assignment		3
	GroupDiscussion/Speaking Skill/Presentation	4 <sup>th</sup> week	1-3
	At the Lahore Karhai	5 <sup>th</sup> week	1-2
FEBRUARY	Class Test/Assignment	2 <sup>nd</sup> Week	1-3

	Class Test/Assignment	3 <sup>rd</sup> Week	1-2
	The Brand Expands	3 <sup>rd</sup> Week 4 <sup>th</sup> Week	3 1
	Discussion on Questions	4 <sup>th</sup> Week	2-3
<b>MARCH</b>	Class Test/Assignment	1 <sup>st</sup> Week	1-3

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 1<sup>st</sup> YEAR)  
SESSION 2020-2021  
DSC-1B [ENG DSC 103]  
English Literature-2 (Poems, Short Stories and Essays)

MONTH	UNIT/TOPIC	WEEK	DAY	CLASS TEST/ASSIGNMENT	GROUP DISCUSSION/SPEAKING SKILL/PRESENTATION
<b>JULY</b>	Syllabus Introduction/ Pattern of Testing	1 <sup>st</sup> Week	1		
	<b>Unit- 1 (Linguistic Plurality within Sufi and Bhakti Traditions: Overview)</b>		2		
	The Mad Lover	1 <sup>st</sup> Week 2 <sup>nd</sup> week	3 1		
	Kafi	2 <sup>nd</sup> week	2-3		
	Baul Song	3 <sup>rd</sup> week	1		
	Discussion on Questions	3 <sup>rd</sup> Week	2-3		
			4 <sup>th</sup> Week		1-2(d)
<b>AUGUST</b>	<b>Unit -II (Language Politics- Hindi and Urdu: Overview)</b>	1 <sup>st</sup> Week	1		
	Introduction: A Conspectus in a House Divided	1 <sup>st</sup> Week	2-3		

	Ghazal	2 <sup>nd</sup> Week	1		
	Lajwanti	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	2-3 1		
	Discussion on Questions	3 <sup>rd</sup> Week	2		
	Hindi	3rd Week	3		
		4 <sup>th</sup> Week		1-2(d)	
	<b>Unit – III (Tribal Verse: Overview)</b>	4 <sup>th</sup> week	3		
SEPTEMBER	<b>An Anthology of Tribal Verse</b>	1 <sup>st</sup> Week	1-3		
	A Munda Song	2 <sup>nd</sup> Week	1		
	A Kondh Song	2 <sup>nd</sup> Week	2		
	Adi Song for the recovery of Lost Health	2 <sup>nd</sup> Week	3		
	Discussion on Questions	3 <sup>rd</sup> Week	1	2 (d)	3(d)
	<b>Unit IV (Dalit Voice: Overview)</b>	3 <sup>rd</sup> Week	1		
	Dalit Sahitya: The Historical Background		2-3		
	Habit	4 <sup>th</sup> Week	1		
	An Untitled Poem		2		
	Discussion on Questions		3		
OCTOBER		1 <sup>st</sup> Week		1(d)	
	KARUKKU	1 <sup>st</sup> Week	2-3		
	Unit V (Writing in English: Overview)	2 <sup>nd</sup> week	1		
	Mother Tongue	2 <sup>nd</sup> Week	2		
	kanthapura	2nd week	3		
	Discussion on Questions	3 <sup>rd</sup> week	1		
	Unit VI: Women Speak – Examples from kannada and Bangla: Overview)	3rd Week	2		
	A Flowering Tree	3 <sup>rd</sup> Week 4 <sup>th</sup> Week	3 1		
	A Women Telling of Rama Tale	5 <sup>th</sup> Week	2-3		
		1 <sup>st</sup> Week		1(d)	2(d)

<b>NOVEMBER</b>	<b>Unit VII ( Literary Cultures- Gujrati andSindhi: Overview )</b>	1st Week	3		
	At The Crossroads of Indic and Iranian Civilizations	2nd Week	1-3		
	Discussion on Questions	3rd Week	1		
		3 <sup>rd</sup> Week		2-3(d)	
	Unit VIII (Nationalism: Overview)	4 <sup>th</sup> Week	1		
	Nationalism in West	4 <sup>th</sup> week	2-3		
		5 <sup>th</sup> Week		1-2(d)	
		5 <sup>th</sup> Week	3		3(d)
<b>DECEMBER</b>	House Test	1 <sup>st</sup> Week			
	Nationalism in India	2 <sup>nd</sup> Week	1-2		
	Discussion on Questions	2 <sup>nd</sup> Week	3		
		3 <sup>rd</sup> Week		1-3(d)	
		4 <sup>th</sup> Week			1-3(d)
		5 <sup>th</sup> week			1-3(d)
		5 <sup>th</sup> week		1-2(d)	
<b>FEBRUARY</b>	Unit IX (Aspects of Civilization: Overview)	2 <sup>nd</sup> Week		1(d)	
	What is Civilization?	2 <sup>nd</sup> Week	2-3		
	Civilization	3 <sup>rd</sup> Week	1-3		
	Discussion on Questions	4 <sup>th</sup> Week	1		
		4 <sup>th</sup> Week		2-3(d)	
<b>MARCH</b>		1 <sup>st</sup> Week			1-3(d)

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/TEACHING PLAN (BA /BSC/BCOM 1<sup>st</sup> YEAR)  
SESSION 2019-2020 ENG AECC 104  
AECC 2 Writing Skill

MONTH	UNIT/TOPIC	WEEK	DAY	PROJECT WORK/ ASSIGNMENT (D=Day)	READING/SPEAKING (D=Day)
JULY	<b>Syllabus Introduction/ Pattern of Testing</b>	1 <sup>st</sup> Week	<b>1</b>		
	Diary Writing	1 <sup>st</sup> Week	2-3		
		2 <sup>nd</sup> Week			1-3 (d)
	Paragraph Writing	3 <sup>rd</sup> week	1-3		
		4 <sup>th</sup> week			1-3(d)
		5 <sup>th</sup> Week		1-3 (d)	
AUGUST	Summary/Note Making	1 <sup>st</sup> Week	1-3		
		2 <sup>nd</sup> Week		1-3 (d)	
		3 <sup>rd</sup> Week			1-3 (d)
	<b>Formal and Informal Letter Writing</b>	4 <sup>th</sup> Week 5 <sup>th</sup> Week	1-3 1-3		
SEPTEMBER		1 <sup>st</sup> Week		1-3 (d)	
		2 <sup>nd</sup> Week			1-3 (d)
		3 <sup>rd</sup> Week			1-3 (d)
		4 <sup>th</sup> Week		1-3 (d)	
		5 <sup>th</sup> Week			1-3 (d)
OCTOBER	CV/Resume Writing	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	1-3 1-3		
		3 <sup>rd</sup> week			1-3 (d)
		4 <sup>th</sup> Week			1-3(d)
NOVEMBER		<b>1<sup>st</sup> Week</b>	<b>1-3</b>		
	Report Writing	2nd Week	1-3		
		3 <sup>rd</sup> Week		1-3(d)	
	Interview/ Feature Articles	4th Week 5 <sup>th</sup> Week	1-3 1-3		
DECEMBER	House Test	1 <sup>st</sup> Week			
		2 <sup>nd</sup> Week			1-3(d)
		3 <sup>rd</sup> Week			1-3(d)
		4 <sup>th</sup> Week		1-3(d)	
	Notice Making	5 <sup>th</sup> Week	1-3		
FEBRUARY		2 <sup>nd</sup> Week		1-3(d)	
		3 <sup>rd</sup> Week			1-3(d)
		4 <sup>th</sup> Week		1-3(d)	

<b>MARCH</b>		1 <sup>st</sup> Week		1-3(d)	
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DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/TEACHING PLAN (BA & BCOM 2nd YEAR)  
SESSION 2020-21  
ENG CE 201  
English -2 Core English Compulsory

MONTH	UNIT/TOPIC	WEEK	DAY	CLASSTEST/Oral/Written ASSIGNMENT (D=Day)	GROUP DISCUSSION/READING SKILLS/ PRESENTATION (D=Day)
<b>JULY</b>	<b>Syllabus Introduction/ Pattern of Testing</b>	1 <sup>st</sup> Week	1		
	<b>Unit- 1 (Poetry: Overview)</b>	1 <sup>st</sup> Week	2		
	A Psalm of Life	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	3 1		
	Animals, When I am Dead My Dearest	2 <sup>nd</sup> week	2-3		
	Discussion on Questions	3 <sup>rd</sup> Week	1-2		
		3 <sup>rd</sup> week		3 (d)	
		4 <sup>th</sup> week			1-3 (d)
<b>AUGUST</b>	The Lake Isle of Innisfree, The Olive Tree	1 <sup>st</sup> Week	1-3		
	Refugee Mother and Child	2 <sup>nd</sup> Week	1-3		
	Discussion on Questions	3 <sup>rd</sup> Week	1-2	3 (d)	3
	<b>Unit II( Short Stories &amp; Essays: Overview)</b>				
	The Power of Prayer	4 <sup>th</sup> Week	1-3		
	Discussion on Questions	5 <sup>th</sup> Week	1		
		5 <sup>th</sup> Week		2	3 (d)
<b>SEPTEMBER</b>	Vivekananda: The Great Journey to the West	1 <sup>st</sup> Week	1-3		
		2 <sup>nd</sup> Week	1-3		
	More Than 100 million Women are Missing	3 <sup>rd</sup> Week	1-3		
		4 <sup>th</sup> Week		3(d)	1-2 (d)



	On The Ignorance of the Learned	5 <sup>th</sup> Week	1-3		
		5 <sup>th</sup> Week			1-3(d)
<b>OCTOBER</b>	Simply Living	1 <sup>st</sup> Week	1-3		
	Towards Creating a Poverty Free World	2 <sup>nd</sup> Week	1-3		
	Discussion on Questions	2 <sup>nd</sup> Week	1	2 (d)	3
	Climate Change and Human Strategy	3 <sup>rd</sup> week	1-3		
		4 <sup>th</sup> Week			1-3 (d)
<b>NOVEMBER</b>	<b>Unit III (Applied Grammar)</b>				
		<b>1<sup>st</sup> Week</b>			Diwali Break
	One Word Substitution	2 <sup>nd</sup> Week	1-3		
		3 <sup>rd</sup> Week	1-3		
		4 <sup>th</sup> Week		1-2	3 (d)
	Words Used as Nouns and Verbs	5 <sup>th</sup> Week	1-3		
<b>DECEMBER</b>	House Test	1 <sup>st</sup> Week			
	Transformation (i)nterchange of Degrees	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	1-3 1-3		
		4 <sup>th</sup> Week	1	2(d)	3
	(ii) Homonyms, Homographs and Homophones	5 <sup>th</sup> Week	1-3		
<b>FEBRUARY</b>		2 <sup>nd</sup> Week	1-3		
		3 <sup>rd</sup> Week		1	2-3
		4 <sup>th</sup> Week			1-3
<b>MARCH</b>		1 <sup>st</sup> Week			1-3

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 2<sup>st</sup> YEAR)  
SESSION 2020-21  
DSC-1A[ENG DSC 202/203]  
English Literature-1 (Essays, Stories and poems)

MONTH	UNIT/TOPIC	WEEK	DAY
JULY	Syllabus Introduction/ Pattern of Testing	1 <sup>st</sup> Week	1-3

	<b>Unit- 1 British Literature and Plays Introduction</b>	1 <sup>st</sup> Week	4-6
	Merchant of the Venice Character overview	1 <sup>st</sup> Week	1-6
	ACT I	2 <sup>nd</sup> Week	1-6
	ACT II	3 <sup>rd</sup> Week	1-6
	ACT II-III	4 <sup>th</sup> week	1-6
	ACT III-IV	5 <sup>th</sup> Week	1-6
	CLASS TEST	5 <sup>th</sup> Week	
<b>AUGUST</b>	<b>ACT IV</b>	1 <sup>st</sup> Week	1-6
	ACT V	2 <sup>nd</sup> Week	1-6
	Discussion on questions/Class Test	3 <sup>rd</sup> Week	1-6
	Oliver Twist Introduction Character overview	4 <sup>th</sup> Week	1
	Chapter 1-4	4 <sup>th</sup> Week	2-6
	Chapter 5-8	5 <sup>th</sup> Week	1-6
	Class Test	5 <sup>th</sup> Week	
<b>SEPTEMBER</b>	Chapter 9-12	1 <sup>st</sup> Week	1-3
	Chapter 13-16	1 <sup>st</sup> Week	4-6
	Chapter 17-20	2 <sup>nd</sup> Week	1-3
	Chapter 21-24	2 <sup>nd</sup> Week	4-6
	Chapter 25-28	3 <sup>rd</sup> Week	1-3
	Chapter 29-32	3 <sup>rd</sup> Week	4-6
	Chapter 33-36	4 <sup>th</sup> Week	1-3
	Chapter 37-40	4 <sup>th</sup> Week	4-6
	Chapter 41-44	5 <sup>th</sup> Week	1-6
	Class Test	5 <sup>th</sup> Week	
<b>OCTOBER</b>	Chapter 45-48	1 <sup>st</sup> Week	1-6
	Chapter 49-53	2 <sup>nd</sup> Week	1-6
	Class Test	2 <sup>nd</sup> Week	
	Unit II (Literary Cross Currents) Before Dying, Windy Night, Shall I Return to this Bengal	3 <sup>rd</sup> Week 4 <sup>th</sup> week	1-6 1-2
	Discussion on Questions/Class Test	4 <sup>th</sup>	3-6
			Diwali Break
<b>NOVEMBER</b>	Forward March, From Some People Laugh, Some People Cry, The Void, So Very Far	2 <sup>nd</sup> Week	1-6
	Enterprise, Night of the Scorpion, Goodby Party for Miss Pushpa	3 <sup>rd</sup> Week	1-6
	Hunger, Dhuali, Grandfather, A Country	4 <sup>th</sup> Week	1-6
	Discussion on Questions/ Class Test	5 <sup>th</sup> Week	1-6

<b>DECEMBER</b>	House Test	1 <sup>st</sup> Week	
	The Holy Panchayat	2 <sup>nd</sup> Week	1-3
	The Card-Sharpner's Daughter	2 <sup>nd</sup> Week	4-6
	Toba Tek Singh	3 <sup>rd</sup> Week 4 <sup>th</sup> Week	1-6 1-3
	Questions/Squirrel	4 <sup>th</sup> Week	4-6
	The Sacred Duty	5 <sup>th</sup> Week	1-4
	Discussion on Questions/Class Test	5 <sup>th</sup> week	4-6
<b>FEBRUARY</b>	Unit-II Autobiography Jothan	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	1-6 1
	Discussion on Questions	3 <sup>rd</sup> Week	2
	Unit-III (Play) Silence, The Court is in Session	3 <sup>rd</sup> Week 4 <sup>th</sup> Week	3-6 1-2
	Discussion on Questions/Class Test	4 <sup>th</sup> Week	4-6
<b>MARCH</b>	Assignment/Presentation	1 <sup>st</sup> Week	1-6

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 2nd YEAR)  
SESSION 2020-21  
DSC-1A[ENG 204-205]  
English Literature-1 (Essays, Stories and poems)

<b>MONTH</b>	<b>UNIT/TOPIC</b>	<b>WEEK</b>	<b>DAY</b>
<b>JULY</b>	Syllabus Introduction/ Pattern of Testing	1 <sup>st</sup> Week	1
	AEEC/SEC - 1: Creative Writing, Book and Media Reviews Unit- 1 Literary Forms	1 <sup>st</sup> Week	2-3
	Poetry: Lyric, Sonnet, Epic, Ode, Ballad	2 <sup>nd</sup> Week	1-3
	Drama: Tragedy and Comedy	3 <sup>rd</sup> Week	1-3
	Fiction: Short Story and Novel	4 <sup>th</sup> week	1-3
	Prose: Essay, Periodical, Article (NewspaperArticle and Blog)	4 <sup>th</sup> Week	1-3
	Class test	5 <sup>th</sup> Week	1-3
<b>AUGUST</b>	Unit -II Literary Terms Plot, Characterization, Monologue, Soliloquy, Aside	1 <sup>st</sup> Week	1-3
	Narrator, Persona, Irony, Metaphor, Simile, Metonymy, Alliteration	2 <sup>nd</sup> Week	1-3
	Rhyme, Onomatopoeia, Oxymoron, Point of View and Theme	3 <sup>rd</sup> Week	1-3
	Discussion on Questions/Class Test	4 <sup>th</sup> Week	1-3

	UNIT-III Reading Literature: Creativity and Imagination: Gift of the Magi	5 <sup>th</sup> Week	3 1-3
SEPTEMBER	Daffodils	1 <sup>st</sup> Week	1-3
	The Dark Room	2 <sup>nd</sup> Week	1-3
	Discussion on Questions	3 <sup>rd</sup> Week	3
	UNIT-IV Media Reviews: Book, Film and TV Programme Reviews	4 <sup>th</sup> Week 5 <sup>th</sup> Week	1-3 1-2
	Class Test	5 <sup>th</sup> Week	3
OCTOBER	AEEC/SEC-2 Translation Studies and Principles of Translation (Basic Concepts and Readings)		
	UNIT-I Introduction to Translation: 1. Definition of Translation— Translating from source language to target language	1 <sup>st</sup> Week	1-3
	2. Purpose of Translation— Translation as a literary, cultural, and knowledge bridge, self-other interaction	2 <sup>nd</sup> Week	1-3
	UNIT-II Approaches to Translation: 1. Domestication: Readability in the target language	3 <sup>rd</sup> week	1-3
	2. Foreignization: Faithfulness to the source language text	4 <sup>th</sup> Week	1-3
NOVEMBER	UNIT-III Methods of Translation: 1. Meta-phrase—sense translation based on difference	1 <sup>st</sup> Week	1-3
	2. Paraphrase—word-to-word translation based on Equivalence 3. Imitation—regulated transformation	3 <sup>rd</sup> Week	1-3
	4. Interpretation and Adaptation 5. Reading: "Preface to Ovid's Epistles" – (1680) by John Dryden	4 <sup>th</sup> Week	1-3
	Class Test/ Questions	5 <sup>th</sup> Week	1-3
DECEMBER	House Test	1 <sup>st</sup> Week	
	<b>UNIT-IV Problems of Translation:</b> <b>1. Cultural Gap</b>	2 <sup>nd</sup> Week	1-3
	2. Untranslatability	3 <sup>rd</sup> Week	1-3
	3. Translation as appropriation of indigenous languages	4 <sup>th</sup> Week	1-3

	Class Test/ Discussion on Questions	5 <sup>th</sup> week	1-3
<b>FEBRUARY</b>	Translation in India:1. Definitions:	2 <sup>nd</sup> Week	1-3
	UNIT-VI Translation: 1. Translating a literary/non-literary passage from Hindi into English and English into Hindi (about 100 words)	3 <sup>rd</sup> Week 4 <sup>th</sup> Week	1-3 1
	Discussion on Questions/Class Test	4 <sup>th</sup> Week	2-3
<b>MARCH</b>	Assignment/Presentation	1 <sup>st</sup> Week	1-3

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 3<sup>rd</sup>YEAR)  
SESSION 2020-21  
AEEC/SEC-3 TECHNICAL WRITING[ENG AEEC/SEC 301]  
AEEC/SEC-4 BUSINESS COMMUNICATION[ENG AEEC/SEC 302]

MONTH	UNIT/TOPIC	WEEK	DAY
<b>JULY</b>	AEEC/SEC-3 Technical Writing ENG AEEC/SEC 301		
	Syllabus Introduction/ Pattern of Testing UNIT-I Language Skills: Tenses	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	1-3 1-3
	Voice	3 <sup>rd</sup> Week	1-3
	Narration and Punctuation	4 <sup>th</sup> Week	1-3
	Class Test/Assignment/Questions	5 <sup>th</sup> Week	1-3
<b>AUGUST</b>	UNIT-II Technical Writing: Definition and Preparation of Manual, Memorandum, Agenda, Minutes of a Meeting, and Powerpoint Presentation	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	1-3 1-3
	UNIT-III Writing Skills: Basic Research Methodology Project Report a) Format -Margins, Headings, Indentation, Pagination, Type Face and Fonts, Common Abbreviations	3 <sup>rd</sup> Week	2-3
	b) Organisation • Preparation of the Basic Plan - Ideas and Background Research • Outline with Headings and Sub-headings • Writing, Reading and Re-writing	4 <sup>th</sup> Week	1-3

	Class Tense/Assignment/Presentation	5th week	1-3
SEPTMBER	c) Contents	1 <sup>st</sup> Week	1-3
	• Cover and Title Page	2 <sup>nd</sup> week	1-3
	• Table of Contents	3 <sup>rd</sup> week	1-3
	• Preface/Acknowledgement		
	• Abstract/Summary		
	• Introduction		
	• Heading and Sub-headings		
	• Findings		
• Conclusion			
• Recommendations			
• Works Consulted and Cited			
	Assignment/Presentation	4 <sup>th</sup> Week	1-3
	Class Test/Questions	5 <sup>th</sup> week	1-3
	ENG AEEC/ SEC 302 AEEC/SEC-4 Business Communication		
	UNIT-I Introducing Business Communication:	1 <sup>st</sup> week	1-3
	Basic Forms of Communication	2 <sup>nd</sup> week	1-3
	Communication Models and Processes: Linear, Transitional and Interactive		
	Effective Communication	4 <sup>th</sup> Week	1-3
	• Principles of Effective Communication	5 <sup>th</sup> week	1-2
	UNIT-II Corporate Communication: Formal and Informal Communication: Grapevine		
	Class Test/Qestions	5 <sup>th</sup> Week	3
OCTOBER	Barriers and Gateways to Communication	1 <sup>st</sup> week	1-3
	Practices in Business Communication Group Discussion Mock Interview	2 <sup>nd</sup> Week	1-3
	Seminars Individual and Group Presentations	3 <sup>rd</sup> Week	1-3
	Questions/Class Test	4 <sup>th</sup> week	1-3
	Assignment/Presentation	5 <sup>th</sup> week	1-3
NOVENBER		1 <sup>st</sup> Week	Diwali Break
	UNIT-III Writing Skills and Modern Communication	2 <sup>nd</sup> Week	1-3
	• Business Letters and Memo Format • Good News and Bad News Letters • Sales Letter		
	• Selection Letter • Fax, E-mail - Formal and Informal • Video Conferencing	3 <sup>rd</sup> Week	1-3

	Class Test/ Questions	4 <sup>th</sup> Week	1-3
DECEMBER	House Test	1 <sup>st</sup> Week	
	<b>UNIT-IV (301)</b> <b>Data Analysis</b> <b>(a) (i) Qualitative Interpretation</b> <b>(ii) Quantitative Interpretation</b> <b>(b) Reading and Interpreting Data:</b> <b>(i) Bar Graphs</b> <b>(ii) Pie Charts</b>	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week 4 <sup>th</sup> Week	1-3
	Class Test/Assignment/Presentation	5 <sup>th</sup> week	1-3
FEBRUARY	UNIT-IV Non-Verbal Aspects of Communication (302) • Body Language • Kinesics • Proxemics • Para Language	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week 4 <sup>th</sup> Week	1-3
	Discussion on Questions/Class Test	5 <sup>th</sup> week	1-3 1
MARCH	Assignment/Presentation	1 <sup>st</sup> Week	1-3

DEPARTMENT OF ENGLISH  
TENTATIVE LESSON/ TEACHING PLAN (BA 3<sup>rd</sup> YEAR)  
SESSION 2020-21  
DSC-1A Soft Skills [ENG DSC 303]  
DSE-1B Academic Writing and Composition [ENG DSE 304]

MONTH	UNIT/TOPIC	WEEK	DAY
JULY	ENG DSE 303 DSE –1A Soft Skills		
	Syllabus Introduction/ Pattern of Testing	1 <sup>st</sup> Week	1-2
	A) Listening Skills: Comprehending Retaining Responding Barriers to Listening Overcoming Barriers to Listening	1 <sup>st</sup> Week 2 <sup>nd</sup> Week	4-6 1
	B) Teamwork: Teamwork involves building relationships and working with other people using a number of important skills and habits: • Working Cooperatively • Contributing to groups with ideas, suggestions, and effort	2 <sup>nd</sup> week 3 <sup>rd</sup> Week	2-6 1-6

	<ul style="list-style-type: none"> <li>• Communication (both giving and receiving)</li> <li>• Sense of Responsibility</li> <li>• Healthy respect for different opinions, customs, and individual preferences</li> <li>• Ability to participate in group decision-making</li> </ul>	4 <sup>th</sup> week	1-6
	<p>C) Emotional Intelligence: Characteristics of Emotional Intelligence:</p> <ul style="list-style-type: none"> <li>• Self-Awareness</li> <li>• Self-Regulation</li> <li>• Motivation</li> <li>• Empathy</li> <li>• Social and Cultural Sensitivity</li> </ul> <p>Class Test/Question</p>	5th week	1-6
<b>AUGUST</b>	<p><b>Ways to Improve Emotional Intelligence:</b></p> <ul style="list-style-type: none"> <li>• Observe how you react to people</li> <li>• Look at your work environment</li> <li>• Do a self-evaluation</li> <li>• Examine how you react to stressful situations</li> <li>• Take responsibility for your actions</li> <li>• Examine how your actions affect others</li> </ul>	1 <sup>st</sup> Week 2 <sup>nd</sup> week	1-6 1-6
	<p>D) Adaptability:</p> <ul style="list-style-type: none"> <li>• See the big picture</li> <li>• Don't be afraid to improvise</li> <li>• Question the status quo</li> <li>• There's no —    in Adaptability</li> <li>• Change your Routine</li> </ul>	3rd Week	1-6
	<p>E) Problem Solving: Four basic steps in solving a Problem:</p> <ul style="list-style-type: none"> <li>• Defining the Problem</li> <li>• Generating Alternatives</li> <li>• Evaluating and Selecting Alternatives</li> <li>• Implementing Solutions</li> </ul>	4 <sup>th</sup> Week 5 <sup>th</sup> week	1-6 1-2
	Assignment/Class Test	5 <sup>th</sup> Week	4-6
<b>SEPTEMBER</b>	<p><b>ENG DSE 304 DSE-1B Academic Writing and Composition</b></p>	1 <sup>st</sup> Week	1
	<p>1. Types of Academic Writing:</p> <ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Analytical</li> <li>• Persuasive</li> <li>• Critical</li> </ul>	1st Week	2-6



	2. Features and Conventions of Academic Writing: (a) Clear, Concise, Objective, Accurate Writing (b) Grammar: Subject-Verb Agreement, Punctuation, Use of Apostrophe, Common Abbreviations	2nd Week 3 <sup>rd</sup> week	1-6 1-6
	Assignments/Presentation	4 <sup>th</sup> Week	1-6
	Class Test/Questions	5 <sup>th</sup> Week	1-6
<b>OCTOBER</b>	(c) Common Errors: Colloquialisms, Jargon, Clichés, Contraction, Repetition, Emotive Language, Spelling and Grammatical Errors	1 <sup>st</sup> Week	1-6
	3. Process of Academic Writing: Pre-Drafting – Research and Brainstorm Drafting – Headings, Sub-headings and Development of the Idea Revising – Making Changes, Correcting and Rewriting Editing – Removing Errors, Proof Readings, Polishing	2ndWeek 3rd week	1-6 1-6
	Discussion on Questions/Class Test	4 <sup>th</sup>	1-6
	Assignment/Presentation	5 <sup>th</sup> week	1-6
			Diwali Break
<b>NOVEMBER</b>	4. Critical Thinking: Analysis Evaluation Synthesis	2nd Week	1-6
	5. Paragraph Writing: Topic Sentence, Elaborative Sentences – Supporting/ Explaining/ Describing/ Discussing/ Concluding Sentence,	3 <sup>rd</sup> Week	1-6
	Transitional Words and Phrases/Assignments	4 <sup>th</sup> Week	1-6
	Discussion on Questions/ Class Test	5 <sup>th</sup> Week	1-6
<b>D E C E M B E R</b>	House Test	1 <sup>st</sup> Week	

	F) Interview Skills(303) Preparation Self-evaluation-SWOT Punctuality	2 <sup>nd</sup> week	1-6
	First Impressions: Professional Dressing, Body Language and Non-verbal Cues • Listening and Speaking • Etiquette and Courtesy	3 <sup>rd</sup> week	1-6
	Assignment/Presentation	4 <sup>th</sup> Week	1-6
	Class/Questions	5 <sup>th</sup> Week	1-6
<b>FEBRUARY</b>	5. Paragraph Writing: (304) Topic Sentence, Elaborative Sentences – Supporting/ Explaining/ Describing/ Discussing/ Concluding Sentence, Transitional Words and Phrases	2 <sup>nd</sup> Week 3 <sup>rd</sup> Week	1-6 1-6
	Discussion on Questions/Class Test/Presentation	4 <sup>th</sup> Week	4-6
<b>MARCH</b>	Assignment/Presentation	1 <sup>st</sup> Week	1-6

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 1 <sup>st</sup> year
<b>Paper</b>	Physical Geography (Theory)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
5-8/8/20	1	Definition and Scope Brief Introduction of Solar System
10-14/8/20	2	Origin of The Earth: Tidal Theory of Jeans and Jeffreys and Big Bang Theory
		<i>Class Test</i>
1-5/9/20	3	Rocks: Classification and Their Characteristics
7-12/9/20	4	<b>Lithosphere</b> Internal Structure of Earth, Theory of Plate Tectonics
		Class Test
5-10/10/20	5	Weathering- Definition, factors and types
12-14/10/20	6	Fluvial Cycle of Erosion – Davis
		<i>Quiz</i>
2-7/11/20	7	<b>Atmosphere</b> Structure and composition of atmosphere, Heat Balance, Pressure and wind systems
9-13/11/20	8	Origin of Tropical Cyclones, Monsoon
		<i>Tutorial and class Test</i>
1-5/12/20	9	Climatic Classification (Koppen).
7-12/12/20	10	<b>Hydrosphere</b> Hydrological Cycle, Bottom Relief Features of Pacific Ocean, Tides and Currents.
		<i>Tutorial and Class test</i>
06-2-21 onward		Revision for final Examination and tests

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 1 <sup>st</sup> year
<b>Paper</b>	General Cartography (Practical)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
17- 22/8/20	1	Cartography as a Science of Communication
24- 29/8/20	2	Basics of Map Reading, Map- Definition, Classification and Significance of Map
		<i>Class Test</i>
14- 19/9/20	3	Scale Definition, Importance and Types of Scale, Three exercises in practical record each on Plain, Comparative and Diagonal Scale. <b>(Practicals work of plain scale)</b>
21- 26/9/20	4	<b>Practical work of Comparative and diagonal scale</b>
		Class Test
14- 17/10/20 19- 24/10/20	5	<b>Map projections</b> Criteria for Choice of Projections; Attributes and Properties of: Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case, Cylindrical Equal Area, Mercator's Projection and Conical Projection with Two Standard Parallel <b>(Theory)</b>
26- 30/10/20 16- 21/11/20	6	<b>Map projections</b> Criteria for Choice of Projections; Attributes and Properties of: Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case, Cylindrical Equal Area, Mercator's Projection and Conical Projection with Two Standard Parallel <b>(Practical)</b>
		<i>Class Test</i>
23- 28/11/20	7	<b>Representation Of Data</b> Line Graph, Line Graph <b>Practical</b> , Bar Diagram Theory, Bar Diagram <b>Practical</b> , Isopleth Theory
14- 19/12/20 21- 24/12/20	8	Isopleth <b>Practical</b> , Choropleth Map Theory, Choropleth Map <b>Practical</b> , Dot Method Theory & Dot Method <b>Practical</b>
		<i>Class Test</i>
22- 25/2/21	9	Climograph and Hythergraph
		Completion of <b>practical</b> file and Revision for final Examination

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 2 <sup>nd</sup> year
<b>Paper</b>	Human Geography (Theory)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
5-8/8/20	1	<b>Introduction</b> Definition, Nature, Major Subfields
10-14/8/20	2	Major Subfields, Contemporary Relevance of Human Geography
1-5/9/20	3	Contemporary Relevance of Human Geography
		Class Test
8-12/9/20	4	Population World Population Distribution, density
		Tutorial
5-10/10/20	5	World Population Growth
12-13/10/20	6	Demographic Transition Theory.
		<i>Class Test</i>
2-7/11/20	7	<b>Space and Society</b> Human Races and its types
9-13/11/20	8	Classification of Human races (Griffith Taylor) and world distribution
		<i>Tutorial</i>
1-5/12/20	9	Major Religions of the world and distribution
7-12/12/20	10	Major languages of the world and distribution
		<i>Class Test</i>
19-25/2/21	11	<b>Settlements</b> Types and Patterns of Rural Settlements Classification of Urban settlements Trends and Patterns of World Urbanization
		Revision

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 2 <sup>nd</sup> year
<b>Paper</b>	Environmental Geography (Theory)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
17- 22/8/20	1	<b>Definition</b> and Scope of Environmental Geography Meaning and Components of Environment
24- 29/8/20	2	<b>Ecosystem</b> – Concept, components and Functions
		<i>Tutorial and Class Test</i>
14- 19/9/20	3	<b>Human-Environment Relationship</b> Environmental Determinism and Possibilism
21- 26/9/20	4	<b>Biomes-</b> Definition Mountain Biome
		Tutorial
14- 17/10/20	5	Desert Biome
19- 24/10/20 27- 30/10/20	6	<b>Environmental Problems: Air and water Pollution</b> Air and water Pollution, Their Causes, Impacts and Management,
		<i>Quiz</i>
16- 21/11/20	7	Biodiversity Loss
23- 28/11/20	8	Environmental Management Initiatives in India Environmental Protection Act, 1982
		<i>Class Test</i>
14- 19/12/20	9	Environmental Policy of India (2006),
21- 24/12/20	10	Chipko Movement
FEB-2021		Revision

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 2 <sup>nd</sup> year
<b>Paper</b>	Regional Planning and Development (Theory) SEC
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week 3days</b>	<b>Topics</b>
10-11/8/20	1	Paper-3 INTRODUCTION Concept, Need and Types of regional Planning
1-3/9/20	2	Characteristics and Delineation of Planning Region
		Tutorial
14- 17/9/20	3	Regionalization: Concept, Hill Region: Case study of Himachal Pradesh (Physical and Cultural aspects)
		<i>Class Test</i>
5-8/10/20	4	MODELS FOR REGIONAL PLANNING: Growth Pole Theory
		Tutorial
3-5/11/20	5	Core Periphery Model
9- 12/11/20	6	Regional Development Initiatives
		<i>Class Test</i>
1-3/12/20	7	Case Studies Integrated tribal development programme (ITDP)
7-9/12/20	8	Case Studies Damodar Valley Corporation (DVC)
		<i>Class Test</i>
DEC-FEB 20-21		Assignments and Revision
		Revision

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 2 <sup>nd</sup> year
<b>Paper</b>	Remote Sensing & GPS (Practical) SEC
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week 3 days</b>	<b>Topics</b>
17-20/8/20	1	Remote Sensing: Definition, Development
24-26/8/20	2	Platforms and Types <b>Practicals</b>
		<i>Class Test</i>
14-17/9/20	3	Aerial Photography: Definitions, Principles  Types and Geometry of Aerial Photograph with <b>practical</b>  Practical work with Aerial Photograph
21-23/9/20	4	Preparation of Aerial Photograph exercises
		<b>Class Test</b>
28-30/9/20	5	Satellite Remote Sensing Principles, EMR Interaction with Atmosphere and Earth Surface
19-22/10/20	6	Practical work of EMR Interaction with Atmosphere and Earth Surface
26-28/10/20	7	Explanation of Landsat Series through PPT and practical
		<i>Class Test</i>
16-19/11/20	8	IRS Satellite Series and its Sensor with practical demonstration through PPT with practical
23-26/11/20	9	Bases of Visual Interpretation of Remote Sensing images PPT and Practical
14-17/12/20	10	Land use/ Land Cover in satellite Imagery with Practical
21-24/12/20	11	Fundamentals of Global Positioning System (GPS) – Principles and Uses with practical
23-25/2/21		<b>GPS Practical Sessions</b>



<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 3rd year
<b>Paper</b>	Geography of India (Theory)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
5-8/8/20 & 10-11/8/20	1	<b>Physical Setting</b> Location, Major physiographic region of India
1-5/9/20	2	Major physiographic region of India
7-12/9/20	3	Climate – Factors, Characteristics Soils of India
		MCQ Test
5- 10/10/20	4	<b>Population</b> Size and Growth since 1901
		Academic Function
		Tutorial
2-7/11/20	5	Population Distribution Population Density
9- 12/11/20	6	Literacy Sex Ratio
		Tutorial Class Test
2-5/12/20	7	<b>Settlement System:</b> Rural Settlement, Rural Settlement Types and Patterns
7- 12/12/20	8	Urban Settlement Types and Pattern.
		Class Test
22- 24/2/21	9	Power (Coal and hydroelectricity),
25- 26/2/21	10	Minerals (iron ore and bauxite)
1-3/3/21	11	Industries (Cotton Textile, Iron & Steel)
		<b>End Term Examination</b>

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 3rd year
<b>Paper</b>	Disaster Management (Theory)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week</b>	<b>Topics</b>
17- 22/8/20	1	<b>Introduction and</b> Definition of Disaster Management Concepts.: Hazards, Risk, Vulnerability and Disasters
		Class Test
25- 29/8/20	2	<b>Disasters in India:</b> Causes, Impact, Distribution: Landslide
14- 19/9/20	3	Causes, Impact, Distribution: Earthquake
21- 25/9/20	4	Causes, Impact, Distribution: Cyclone
		Class Test
28- 31/9/20	5	<b>Human Induced Disasters:</b> Causes, Impact, Distribution: Forest Fire
		<b>Tutorial and seminar</b>
19- 24/10/20	6	Causes, Impact, Distribution: Road Accidents
		<i>Class Test</i>
27- 30/10/20	7	<b>Response and Mitigation to Disasters:</b> Mitigation and Preparedness,
16- 21/11/20	8	NDMA and NIDM
23- 28/11/20	9	Indigenous Knowledge and Community-Based Disaster Management.
		Assignments
21- 24/12/20	10	Do's and Don'ts During Disasters
		<i>Class test</i>
FEB 21		<i>Revision</i>
		<b>End Term Examination</b>

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 3rd year
<b>Paper</b>	Geographic info. System (Practical) SEC
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week 3 days</b>	<b>Topics</b>
10-11/8/20	1	Meaning and Scope of GIS
1-3/9/20	2	Components of GIS
7-11/9/20	3	History of Geographic Information System (GIS)
		Class Test
5-8/10/20	4	GIS Data Structures: Types (Spatial and Non-Spatial) Practical demonstration
12- 13/10/20	5	Raster Data Structure Practical work
2-3/11/20	6	Vector Data Structure Practical Work
		Practical work Class Test
4-7/11/20 9- 13/11/20	7	<b>Spatial referencing system</b> Concept of Georeferencing Practical demonstration how to georeferenced toposheet in QGIS an open-source GIS software
		<i>Continuous practices with the software</i>
1-5/12/20	8	Editing and attribute data integration Theory
		Practices on QGIS
10- 12/12/20	9	<b>GIS based Exercises on QGIS GIS software</b> Georeferencing
22- 24/2/21	10	Extraction of Land Use/Land Cover layers of any area and thematic mapping Practical
		Class Test
		<b>End Term Examination</b>

<b>Name of Assistant Professor</b>	Satpal Singh
<b>Class</b>	B.A. 3rd year
<b>Paper</b>	Field Technique and survey-based project report (Practical)
<b>Subject</b>	Geography (2020-21)

<b>Dates</b>	<b>Week 3 days</b>	<b>Topics</b>
17- 22/8/20  24- 29/8/20	1	<b>Introduction</b> Field Work in Geographical Studies–Role, Value and Ethics of Field-Work, Defining the Field and Identifying the Case Study–Rural /Urban/Physical /Human/ Environmental <b>Field Techniques</b> Merits, Demerits and Selection of the Appropriate Technique; Observation (Participant/Non Participant).
14- 19/9/20	2	Instructions regarding Field work
21- 26/9/20	3	Field work in campus
19- 24/10/20	4	<b>Questionnaires</b> (Open/Closed/ Structured/Non-Structured); Interview with Special Focus on Focused Group Discussions; Space Survey (Transects and Quadrants, Constructing a Sketch).
26- 30/10/20	5	Preparation of Questionnaires Field visit
16- 21/11/20	6	GPS Demonstration
24- 28/11/20	7	report preparation Report Writing
Dec-FEB 20-21	8	report preparation Report Writing
		<b>End Term Examination</b>

Satpal Singh

Assistant Professor

LBSGPGC Saraswatinagar Shimla

हिंदी विभाग, लाल बहादुर शास्त्री राजकीय महाविद्यालय सरस्वती नगर, ज़िला शिमला,  
हिप्र

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक प्रथम वर्ष (Core Compulsory)  
विषय - प्रयोजनमूलक हिंदी (HIND101)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	इकाई - 1 1.1 पत्र लेखन	पहला सप्ताह	
	प्रारूपण	दूसरा सप्ताह	
	टिप्पण	तीसरा सप्ताह	
	प्रतिवेदन	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	पत्राचार - अर्थ एवं प्रकार	पहला सप्ताह	
	व्यावहारिक, व्यावसायिक एवं सरकारी पत्र लेखन	दूसरा सप्ताह	
	अनुवाद : परिभाषा, विशेषता एवं उपयोगिता	तीसरा सप्ताह	
	इकाई - 2 2.1 मुहावरे और लोकोक्तियाँ, अर्थ, परिभाषा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	विभिन्न मुहावरे तथा लोकोक्तियाँ	पहला सप्ताह	
	2.2 शब्द- शुद्धि, वाक्य शुद्धि	दूसरा सप्ताह	
	शब्द रूप (तत्सम, तद्भव, देशज तथा विदेशी)	तीसरा सप्ताह	
	इकाई - 3 3.1 पर्यायवाची एवं विलोम शब्द	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	3.2 अनेकार्थी शब्द	पहला सप्ताह	
	वाक्य या वाक्यांश के लिए एक शब्द अथवा अनेक शब्दों के लिए एक शब्द	दूसरा सप्ताह	
	3.3 देवनागरी लिपि अर्थ, नामकरण	तीसरा सप्ताह	
	विशेषताएँ व वैज्ञानिकता	चौथा सप्ताह	

		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	मानकीकरण एवं सुधार के उपाय	पहला सप्ताह	
	इकाई - 4	दूसरा सप्ताह	
	4.1 कम्प्यूटर में हिन्दी प्रयोग		
	कम्प्यूटर की संरचना	तीसरा सप्ताह	
	वर्तनी संशोधन एवं इन्टरनेट कार्यप्रणाली	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.2 पारिभाषिक शब्दावली	तीसरा सप्ताह	
	4.3 कार्यालयी हिन्दी और अनुवाद	चौथा सप्ताह	
			माह के अंतिम दिवस
फरवरी	विशेषताएँ	दूसरा सप्ताह	
	अनुवाद-प्रक्रिया की समस्याएँ एवं कठिनाइयाँ	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
			माह के अंतिम दिवस
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक प्रथम वर्ष (DSC 1A)  
विषय - हिंदी साहित्य का इतिहास (HIND102)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	1.1 काल विभाजन एवं नामकरण	दूसरा सप्ताह	
	आदिकालीन काव्य धाराएँ सिद्ध	तीसरा सप्ताह	

	नाथ एवं जैन साहित्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	1.2 प्रमुख रासो काव्य	पहला सप्ताह	
	1.3 आदिकालीन हिन्दी साहित्य की सामान्य विशेषताएँ।	दूसरा सप्ताह	
	इकाई - 2 2.1 भक्ति आन्दोलन : परिचय	तीसरा सप्ताह	
	2.1 भक्ति आन्दोलन : सामाजिक-सांस्कृतिक पृष्ठभूमि	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	2.2 प्रमुख निर्गुण कवि	पहला सप्ताह	
	प्रमुख सगुण कवि	दूसरा सप्ताह	
	2.3 भक्तिकाल की सामान्य विशेषताएँ।	तीसरा सप्ताह	
	भक्तिकाल – साहित्य का स्वर्णकाल	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	इकाई - 3 3.1 रीतिकाल की ऐतिहासिक पृष्ठभूमि	पहला सप्ताह	
	3.2 रीतिबद्ध	दूसरा सप्ताह	
	3.3 रीतिसिद्ध	तीसरा सप्ताह	
	रीतिमुक्त कवि	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	इकाई - 4 4.1 1857 का स्वतंत्रता संघर्ष	पहला सप्ताह	
	हिन्दी नवजागरण	दूसरा सप्ताह	
	भारतेन्दु युगीन साहित्य	तीसरा सप्ताह	
	भारतेन्दु युग के साहित्य की विशेषताएँ व नवजागरण	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	

	4.3 मैथिलीशरण गुप्त	तीसरा सप्ताह	
	राष्ट्रीय काव्यधारा के कवि	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	4.2 महावीर प्रसाद द्विवेदी और उनका युग	दूसरा सप्ताह	
	द्विवेदी युग के प्रमुख गद्य लेखक और कवि	तीसरा सप्ताह	
	4.4 छायावाद प्रगतिवाद, प्रयोगवाद और नई कविता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	हिन्दी में गद्य विधाओं का उद्भव और विकास - उपन्यास, कहानी, नाटक, निबंध	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक प्रथम वर्ष (DSC 1B)  
विषय - मध्यकालीन हिंदी कविता (HIND103)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	इकाई - 1	पहला सप्ताह	
	1.1 कबीर तथा सूरदास का व्यक्तित्व एवं कृतित्व सामान्य परिचय		
	1.2 कबीर तथा सूरदास की काव्यगत विशेषताएँ	दूसरा सप्ताह	
	1.3 कबीर की साखियाँ - गुरुदेव को अंग दोहा संख्या 3,4	तीसरा सप्ताह	
	कुसंगति को अंग 6,7	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल



अगस्त	कस्तुरिया मृग को अंग 4,9	पहला सप्ताह	
	कबीर के पद - 1,2,15,16	दूसरा सप्ताह	
	1.4 सूरदास के पद - 1, 2, 43, 44, 111, 115	तीसरा सप्ताह	
	सूरदास के पद - 354, 355, 387, 402	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	इकाई - 2 2.1 तुलसीदास तथा मीराबाई का व्यक्तित्व एवं कृतित्व सामान्य परिचय	पहला सप्ताह	
	2.2 तुलसीदास तथा मीराबाई की काव्यगत विशेषताएँ	दूसरा सप्ताह	
	2.3 बालकांड - 1	तीसरा सप्ताह	
	उत्तरकांड - 96, 106	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	विनय पत्रिका पद संख्या - 105 111, 162	पहला सप्ताह	
	2.4 मीराबाई के पद - 5, 17, 18, 19, 22, 23, 25, 41, 73, 158	दूसरा सप्ताह	
	इकाई - 3 3.1 रसखान तथा बिहारी का व्यक्तित्व एवं कृतित्व सामान्य परिचय	तीसरा सप्ताह	
	3.2 रसखान तथा बिहारी की काव्यगत विशेषताएँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	3.3 रसखान के पद 1, 2, 3, 4, 5, 6, 7	पहला सप्ताह	
	3.4 बिहारी के दोहे-2, 15, 20, 25, 38, 16, 69, 70, 110, 123	दूसरा सप्ताह	
	इकाई 4 4.1 भूषण तथा घनानंद का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	तीसरा सप्ताह	
	4.2 भूषण तथा घनानंद की	चौथा सप्ताह	

	काव्यगत विशेषताएँ		
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.3 शिवराज - भूषण - 2 से 9 तक दोहे	तीसरा सप्ताह	
	4.4 धनानंद के छंद - 1 से 8 तक	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	पाठ्यक्रम की पुनरावृत्ति	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक प्रथम वर्ष (AECC 2)  
विषय - हिंदी भाषा और सम्प्रेषण (HIND104)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	इकाई - 1	पहला सप्ताह	
	1.1 भाषा की परिभाषा, प्रकृति एवं विविध रूप		
	1.2 हिंदी भाषा की विशेषताएँ	दूसरा सप्ताह	
	क्रिया, विभक्ति, सर्वनाम	तीसरा सप्ताह	
	विशेषण एवं अव्यय संबंधी विशेषताएँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	1.3 हिंदी की वर्ण-व्यवस्था	पहला सप्ताह	
	स्वर एवं व्यंजन	दूसरा सप्ताह	
	2.1 स्वर के प्रकार ह्रस्व, दीर्घ तथा संयुक्त	तीसरा सप्ताह	

	2.2 व्यंजन के प्रकार स्पर्श, अन्तस्थ, ऊष्म	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	अल्पप्राण, महाप्राण	पहला सप्ताह	
	घोष तथा अघोष	दूसरा सप्ताह	
	इकाई - 3 3.1 वर्णों का उच्चारण स्थान : कण्ठ्य, तालव्य, मूर्धन्य,	तीसरा सप्ताह	
	दन्त्य, ओष्ठ्य तथा दन्तोष्ठ्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्तूबर	3.2 बलाघात, संगम, अनुतान तथा संधि	पहला सप्ताह	
	इकाई - 4 4.1 भाषा संप्रेषण के चरण : श्रवण, अभिव्यक्ति,	दूसरा सप्ताह	
	वाचन तथा लेखन	तीसरा सप्ताह	
		चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	4.2 हिंदी वाक्य रचना	पहला सप्ताह	
	वाक्य और उपवाक्य	दूसरा सप्ताह	
	वाक्य भेद	तीसरा सप्ताह	
	वाक्य का रूपान्तर	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.3 भावार्थ और व्याख्या	तीसरा सप्ताह	
	आशय लेखन	चौथा सप्ताह	
	विविध प्रकार के पत्र लेखन	माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	पाठ्यक्रम की पुनरावृत्ति	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	

	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक द्वितीय वर्ष (Core Compulsary)  
विषय - अनिवार्य हिंदी 'रचना पुंज' (HIND201)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई 1 1.1 कबीर, घनानंद	दूसरा सप्ताह	
	सूर्यकांत त्रिपाठी निराला तथा बालकृष्ण शर्मा नवीन का सामान्य परिचय	तीसरा सप्ताह	
	1.2 कबीर - पन्द्रह दोहे	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	घनानंद - 3 कवित्त, 3 सवैये	पहला सप्ताह	
	1.3 सूर्यकांत त्रिपाठी निराला : तोड़ती पत्थर, विनय	दूसरा सप्ताह	
	बालकृष्ण शर्मा नवीन : विप्लव गायन	तीसरा सप्ताह	
	इकाई - 2 2.1 सच्चिदानन्द हीरानन्द वात्स्यायन 'अज्ञेय'	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	गजानन माधव मुक्तिबोध एवं सुदामा पाण्डे धूमिल का सामान्य परिचय	पहला सप्ताह	
	2.2 अज्ञेय : कितनी नावों में कितनी बार, दूर्वाचल	दूसरा सप्ताह	

	मुक्तिबोध : मुझे तुम्हारा साथ मिला है, ओ मेघ	तीसरा सप्ताह	
	2.3 धूमिल : दस्तक, रोटी और संसद	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	इकाई - 3 3.1 प्रेमचन्द, मोहन राकेश	पहला सप्ताह	
	काशीनाथ सिंह, उदय प्रकाश का सामान्य परिचय	दूसरा सप्ताह	
	3.2 प्रेमचन्द - ईदगाह	तीसरा सप्ताह	
	मोहन राकेश - मलवे का मालिक	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	काशीनाथ सिंह : अपना रास्ता लो बाबा	पहला सप्ताह	
	उदय प्रकाश- छप्पन तोले का करथन	दूसरा सप्ताह	
	इकाई - 4 4.1 महादेवी वर्मा, रामधारी सिंह दिनकर	तीसरा सप्ताह	
	श्रीलाल शुक्ल का सामान्य परिचय	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.2 महादेवी वर्मा : जीने की कला	तीसरा सप्ताह	
	रामधारी सिंह 'दिनकर' : नेता नहीं, नागरिक चाहिए	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	श्रीलाल शुक्ल - अंगद का पाँव	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की

			तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक द्वितीय वर्ष (DSC 1C)  
विषय - आधुनिक हिंदी कविता (HIND202)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	इकाई - 1 1.1 भारतेन्दु हरिश्चन्द्र तथा अयोध्या सिंह उपाध्याय 'हरिऔध' का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	पहला सप्ताह	
	1.2 भारतेन्दु हरिश्चन्द्र तथा अयोध्या सिंह उपाध्याय 'हरिऔध' की काव्यगत विशेषताएँ	दूसरा सप्ताह	
	1.3 भारतेन्दु हरिश्चन्द्र कविताएँ - भारत दुर्दशा, वर्षा विनोद	तीसरा सप्ताह	
	प्रेम मालिका, प्रेमाश्रु वर्षण	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	1.4 अयोध्या सिंह उपाध्याय 'हरिऔध' : कविताएँ - प्रिय प्रवास, दुखिया के आँसू	पहला सप्ताह	
	एक बूँद, काँटा और फूल	दूसरा सप्ताह	
	इकाई - 2 2.1 मैथिलीशरण गुप्त तथा जयशंकर प्रसाद का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	तीसरा सप्ताह	
	2.2 मैथिलीशरण गुप्त तथा जयशंकर प्रसाद की काव्यगत विशेषताएँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	2.3 मैथिलीशरण गुप्त कविताएँ - भारत भारती, मातृभूमि	पहला सप्ताह	
	आशा, सन्देश	दूसरा सप्ताह	

	2.4 जयशंकर प्रसाद कविताएँ - ले चल वहाँ भुलावा देकर, बीती विभावरी जाग री	तीसरा सप्ताह	
	अरुण यह मयुमय देश हमारा, हृदय का सौंदर्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	इकाई - 3 3.1 सूर्यकांत त्रिपाठी निराला तथा सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	पहला सप्ताह	
	3.2 सूर्यकांत त्रिपाठी निराला तथा सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' की काव्यगत विशेषताएँ	दूसरा सप्ताह	
	3.3 सूर्यकांत त्रिपाठी निराला : कविताएँ - वर दे, वीणा वादिनी वर दे, तोड़ती पत्थर	तीसरा सप्ताह	
	स्नेह निर्झर बह गया है, विधवा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	3.4 सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' : कविताएँ - उड़ चल, हारिल, कलगी बाजरे की,	पहला सप्ताह	
	साँप, नया कवि : आत्म स्वीकार	दूसरा सप्ताह	
	इकाई - 4 4.1 नागार्जुन तथा नरेश मेहता का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	तीसरा सप्ताह	
	4.2 नागार्जुन तथा नरेश मेहता की काव्यगत विशेषताएँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.3 नागार्जुन : कविताएँ - यह दन्तुरित मुस्कान, प्रेत का बयान	तीसरा सप्ताह	
	4.4 नरेश मेहता : कविताएँ - तीर्थ	चौथा सप्ताह	

	जल		
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	पीले फूल कनेर के, मेघ में	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक द्वितीय वर्ष (DSC 1D)  
विषय - हिंदी गद्य साहित्य (HIND203)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई - 1	दूसरा सप्ताह	
	1.1 जैनेन्द्र कुमार व्यक्तित्व एवं कृतित्व		
	1.2 उपन्यास : त्यागपत्र पाठपरक अध्ययन	तीसरा सप्ताह	
	1.2 उपन्यास : त्यागपत्र पाठपरक अध्ययन	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	1.2 उपन्यास : त्यागपत्र पाठपरक अध्ययन	पहला सप्ताह	
	1.2 उपन्यास : त्यागपत्र पाठपरक अध्ययन	दूसरा सप्ताह	
	1.3 त्यागपत्र : तात्विक समीक्षा	तीसरा सप्ताह	



	1.3 त्यागपत्र : तात्विक समीक्षा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	1.3 त्यागपत्र : तात्विक समीक्षा	पहला सप्ताह	
	1.3 त्यागपत्र : तात्विक समीक्षा	दूसरा सप्ताह	
	इकाई - 2 2.1 प्रेमचंद, जयशंकर प्रसाद, यशपाल एवं उषा प्रियंवदा का व्यक्तित्व एवं कृतित्व	तीसरा सप्ताह	
	कहानियों का पाठपरक अध्ययन - नमक का दरोगा - प्रेमचंद	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्तूबर	आकाशदीप - जयशंकर प्रसाद	पहला सप्ताह	
	परदा - यशपाल	दूसरा सप्ताह	
	वापसी - उषा प्रियंवदा	तीसरा सप्ताह	
	2.3 उपर्युक्त कहानियों की तात्विक समीक्षा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	इकाई - 3 3.1 रामचन्द्र शुक्ल तथा हजारीप्रसाद द्विवेदी का व्यक्तित्व एवं कृतित्व	पहला सप्ताह	
	लोभ और प्रीति - रामचन्द्र शुक्ल	दूसरा सप्ताह	
	कुटज - हजारीप्रसाद द्विवेदी	तीसरा सप्ताह	
	3.3 उपर्युक्त निबन्धों की तात्विक समीक्षा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	इकाई - 4 4.1 महादेवी वर्मा तथा प्रभा खेतान का व्यक्तित्व एवं कृतित्व	तीसरा सप्ताह	
	चिन्तन के क्षण - महादेवी वर्मा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल

फरवरी	संस्कृति और राष्ट्र - प्रभा खेतान	दूसरा सप्ताह	
	4.3 उपर्युक्त निबन्धों की तात्विक समीक्षा।	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक द्वितीय वर्ष (SEC - 1)  
विषय - कार्यालयी हिंदी (HIND204)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई 1 1.1 हिन्दी भाषा के विभिन्न रूप- राष्ट्रभाषा	दूसरा सप्ताह	
	राजभाषा, जनभाषा	तीसरा सप्ताह	
	1.2 शिक्षण माध्यम-भाषा, संचार भाषा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	सर्जनात्मक भाषा, यांत्रिक भाषा	पहला सप्ताह	
	इकाई - 2 2.1 राजभाषा का स्वरूप	दूसरा सप्ताह	
	भारतीय संविधान में राजभाषा संबंधी परिनियमावली	तीसरा सप्ताह	
	2.2 राजभाषा के रूप में हिन्दी	चौथा सप्ताह	

		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	हिन्दी के समक्ष व्यावहारिक कठिनाइयाँ एवं संभावित समाधान	पहला सप्ताह	
	इकाई - 3 3.1 टिप्पण (नोटिंग)	दूसरा सप्ताह	
	प्रारूपण/आलेखन (ड्राफ्टिंग)	तीसरा सप्ताह	
	पल्लवन	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्तूबर	संक्षेपण	पहला सप्ताह	
	3.2 विभिन्न प्रकार के पत्राचार	दूसरा सप्ताह	
	प्रशासनिक पत्रावली की निष्पादन प्रक्रिया	तीसरा सप्ताह	
	इकाई - 4 4.1 पारिभाषिक शब्दावली	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	4.2 कार्यालयी प्रयोजनों में विभिन्न यांत्रिक उपकरणों का अनुप्रयोग	पहला सप्ताह	
	कम्प्यूटर	दूसरा सप्ताह	
	लैपटॉप	तीसरा सप्ताह	
	टैबलेट	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	टेलीप्रिंटर	तीसरा सप्ताह	
	टैलेक्स, वीडियो कान्फ्रेंसिंग	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	पाठ्यक्रम की पुनरावृत्ति	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की

			तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक द्वितीय वर्ष (SEC - 2)  
विषय - अनुवाद विज्ञान (HIND206)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई - 1 1.1 अनुवाद का तात्पर्य	दूसरा सप्ताह	
	अनुवाद के विभिन्न प्रकार - भाषान्तरण	तीसरा सप्ताह	
	सारानुवाद तथा रूपान्तरण में साम्य-वैषम्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	अनुवाद के प्रमुख प्रकार - कार्यालयी, साहित्यिक	पहला सप्ताह	
	ज्ञान-विज्ञानपरक, विधिक, वाणिज्यिक	दूसरा सप्ताह	
	1.2 अनुवाद के शिल्पगत भेद - अविकल अनुवाद (लिटरेल)	तीसरा सप्ताह	
	भावानुवाद / छायानुवाद, आशु अनुवाद	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	डबिंग, कम्प्यूटर अनुवाद	पहला सप्ताह	
	इकाई - 2 2.1 साहित्यिक अनुवाद के प्रमुख रूप-काव्यानुवाद	दूसरा सप्ताह	
	कथानुवाद, नाट्यानुवाद	तीसरा सप्ताह	
	2.2 अनुवाद में पर्यवेक्षण (वेटिंग) की भूमिका	चौथा सप्ताह	

		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	इकाई - 3 3.1 वैज्ञानिक तकनीकी शब्दावली का अनुवाद	पहला सप्ताह	
	मुहावरों / लोकोक्तियों का अनुवाद	दूसरा सप्ताह	
	संक्षिप्ताक्षरों तथा कूटपदों का अनुवाद	तीसरा सप्ताह	
	आंचलिक शब्दावली का अनुवाद	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	व्यंजनापरक लाक्षणिक पद प्रयोगों का अनुवाद	पहला सप्ताह	
	3.2 अनुवाद की सम्पादन प्रविधि	दूसरा सप्ताह	
	3.3 अनुवादक की अर्हता	तीसरा सप्ताह	
	सफल अनुवाद के अभिलक्षण	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	इकाई - 4 4.1 विश्वभाषाओं की प्रमुख कृतियों के हिन्दी अनुवाद	तीसरा सप्ताह	
	हिन्दी की प्रमुख कृतियों के विश्वभाषाओं में किये गये अनुवाद	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	4.2 भारत में अनुवाद प्रशिक्षण की आवश्यकता व प्रमुख केन्द्र	दूसरा सप्ताह	
	अनुवाद के राष्ट्रीय प्राधिकरण के गठन	तीसरा सप्ताह	
	4.3 हिन्दी अनुवाद का भविष्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी

	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक तृतीय वर्ष (SEC 3)  
विषय - रंग आलेख एवं रंगमंच (HIND301)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई 1 1.1 नाटक के प्रमुख प्रकार और उनका रचना विधान	दूसरा सप्ताह	
	पूर्णांकी, एकांकी, लोकनाटक	तीसरा सप्ताह	
	प्रहसन, काव्यनाटक, नुक्कड़ नाटक, प्रतीक नाटक	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	भावनाटक, पाठ्यनाटक, रेडियो नाटक, टीवी नाटक	पहला सप्ताह	
	इकाई - 2 2.1 हिन्दी नाट्यशास्त्र	दूसरा सप्ताह	
	नाट्य लेखन का इतिहास	तीसरा सप्ताह	
	2.2 हिन्दी नाटक की प्रमुख प्रवृत्तियाँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	सामाजिक, सांस्कृतिक, ऐतिहासिक	पहला सप्ताह	
	समस्यामूलक तथा एबसर्ड नाटक	दूसरा सप्ताह	
	इकाई - 3 3.1 हिन्दी के प्रमुख नाटक	तीसरा सप्ताह	
	हिन्दी के प्रमुख नाटककार	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	3.2 हिन्दी रंगमंच के प्रमुख रूप - 1. शौकिया मंच	पहला सप्ताह	
	व्यावसायिक मंच	दूसरा सप्ताह	
	सरकारी मंच	तीसरा सप्ताह	

	3.3 हिन्दी क्षेत्र की प्रसिद्ध रंगशालाएं तथा संस्थाएँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	इकाई - 4 4.1 रंग शिल्प प्रशिक्षण, रंग स्थापत्य	पहला सप्ताह	
	रंग सज्जा, रंग दीपन, ध्वनि व्यवस्था एवं प्रसाधन	दूसरा सप्ताह	
	निर्देशन एवं अभिनय रंगमंचीय भाषा की विशेषताएं।	तीसरा सप्ताह	
	4.2 रंग आलेख की प्रविधि	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	वस्तुविधान, पात्र परिकल्पना	तीसरा सप्ताह	
	परिस्थिति योजना	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	संवाद लेखन का वैशिष्ट्य	दूसरा सप्ताह	
	रंग निर्देशों की उपयोगिता	तीसरा सप्ताह	
	4.3 रंग समीक्षा का महत्त्व	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक तृतीय वर्ष (SEC - 4)  
विषय - समाचार संकलन और लेखन (HIND304)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	

	इकाई 1 1.1 समाचार : अवधारणा, परिभाषा	दूसरा सप्ताह	
	बुनियादी तत्त्व, समाचार और संवाद	तीसरा सप्ताह	
	संरचना (घटक), समाचार मूल्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	समाचार के स्रोत	पहला सप्ताह	
	1.2 समाचार संग्रह पद्धति और लेखन प्रक्रिया	दूसरा सप्ताह	
	सिद्धान्त और मार्गदर्शक बातें	तीसरा सप्ताह	
	विकासशील और जनरुचि की दृष्टियाँ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	इकाई - 2 2.1 समाचार का वर्गीकरण	पहला सप्ताह	
	खोजी, व्याख्यात्मक	दूसरा सप्ताह	
	अनुवर्तन समाचार	तीसरा सप्ताह	
	2.2 संवाददाता : भूमिका, अर्हता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	श्रेणियाँ, प्रकार्य	पहला सप्ताह	
	व्यवहार संहिता	दूसरा सप्ताह	
	2.3 रिपोर्टिंग के क्षेत्र और प्रकार	तीसरा सप्ताह	
	विधायिका, न्यायपालिका	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	मंत्रालय और प्रशासन, विदेश, रक्षा	पहला सप्ताह	
	राजनीति, अपराध और न्यायालय	दूसरा सप्ताह	
	दुर्घटना एवं नैसर्गिक आपदा	तीसरा सप्ताह	
	ग्रामीण, कृषि, विकास	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	अर्थ एवं वाणिज्य बैठकें एवं	तीसरा सप्ताह	



	सम्मेलन		
	संगोष्ठी, पत्रकार वार्ता, साहित्य एवं संस्कृति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	विज्ञान, अनुसंधान एवं तकनीकी विषय, खेलकूद, पर्यावरण, मानवाधिकार और अन्य सामाजिक विषयों और क्षेत्रों से सम्बन्धित रिपोर्टिंग	दूसरा सप्ताह	
	इकाई - 3 3.1 इलेक्ट्रॉनिक माध्यमों से प्राप्त समाचारों का पुनर्लेखन । 3.2 लीड : अर्थ, प्रकार, विशेषता, महत्त्व ।	तीसरा सप्ताह	
	इकाई - 4 4.1 शीर्षक: अर्थ, प्रकार, लिखाने की कला महत्त्व 4.2 रिपोर्टिंग कला और विज्ञान के रूप में विश्लेषण, वस्तुपरकता और भाषा-शैली	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक तृतीय वर्ष (DSC 1A)  
विषय - लोक साहित्य (HIND305)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई - 1 1.1 लोक साहित्य परिभाषा एवं स्वरूप	दूसरा सप्ताह	

	लोक साहित्य के विशिष्ट अध्येता	तीसरा सप्ताह	
	लोक संस्कृति अवधारणा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	लोक संस्कृति और साहित्य	पहला सप्ताह	
	लोक साहित्य के अध्ययन की प्रक्रिया	दूसरा सप्ताह	
	लोक साहित्य के संकलन की समस्याएँ	तीसरा सप्ताह	
	1.2 लोक साहित्य के प्रमुख रूप लोक गीत, लोक नाट्य	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	लोक कथा, लोकगाथा, लोकोक्ति	पहला सप्ताह	
	इकाई - 2 2.2 2.1 लोकगीत - संस्कार गीत, व्रतगीत	दूसरा सप्ताह	
	श्रम परिहार गीत, ऋतुगीत	तीसरा सप्ताह	
	2.2 लोकनाट्य - रामलीला, स्वांग, यक्षगान	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	भवाई, माच, तमाशा, नौटंकी, जात्रा, कथकली	पहला सप्ताह	
	इकाई 3 3.1 लोककथा - व्रतकथा, परीकथा	दूसरा सप्ताह	
	नागकथा, बोधकथा	तीसरा सप्ताह	
	कथानक रूढ़ियाँ एवं अभिप्राय	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	लोककथा निर्माण में अभिप्राय	पहला सप्ताह	
	3.2 लोकगाथा - लोकगाथा की भारतीय परम्परा	दूसरा सप्ताह	
	लोकगाथा की सामान्य प्रवृत्तियाँ	तीसरा सप्ताह	
	लोकगाथा प्रस्तुति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल

दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	इकाई 4 4.1 प्रसिद्ध लोकगाथाएँ भरथरी (राजा भर्तृहरि)	तीसरा सप्ताह	
	गूगा गाथा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	गढ़ मलौण, मदना की हार	दूसरा सप्ताह	
	महासती सूरमी, मोहणा	तीसरा सप्ताह	
	नूरपुर का राजा जगत सिंह, सुन्नी भुंजू, कुंजू चंचलो, रानी सुनैना	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक तृतीय वर्ष (DSC 2A)  
विषय - छायावादोत्तर हिंदी कविता (HIND306)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई 1 1.1 सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' तथा गजानन माधव मुक्तिबोध का व्यक्तित्व एवं कृतित्व सामान्य परिचय	दूसरा सप्ताह	
	1.2 सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' तथा गजानन माधव मुक्तिबोध की काव्यगत विशेषताएँ	तीसरा सप्ताह	
	1.3 सच्चिदानंद हीरानंद वात्स्यायन 'अज्ञेय' : कविताएँ - कलगी बाजरे की	चौथा सप्ताह	

		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	यह दीप अकेला	पहला सप्ताह	
	1.4 गजानन माधव मुक्तिबोध: कविताएँ - भूल गलती	दूसरा सप्ताह	
	एक रग का राग	तीसरा सप्ताह	
	इकाई - 2 2.1 नागार्जुन तथा शमशेर बहादुर सिंह का व्यक्तित्व एवं कृतित्व सामान्य परिचय	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	2.2 नागार्जुन तथा शमशेर बहादुर सिंह की काव्यगत विशेषताएँ	पहला सप्ताह	
	2.3 नागार्जुन : कविताएँ - अकाल और उसके बाद कालिदास	दूसरा सप्ताह	
	2.4 शमशेर बहादुर सिंह : कविताएँ - सूना सूना पथ है	तीसरा सप्ताह	
	उदास झरना, वह सलोना जिस्म	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	इकाई - 3 3.1 भवानी प्रसाद मिश्र तथा कुँवर नारायण का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	पहला सप्ताह	
	3.2 भवानी प्रसाद मिश्र तथा कुँवर नारायण की काव्यगत विशेषताएँ	दूसरा सप्ताह	
	3.3 भवानी प्रसाद मिश्र : कविताएँ - कहीं नहीं बचे	तीसरा सप्ताह	
	गीत फरोश	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	3.4 कुँवर नारायण : कविताएँ - नचिकेता	पहला सप्ताह	
	इकाई - 4 4.1 सर्वेश्वरदयाल सक्सेना तथा केदारनाथ सिंह का व्यक्तित्व एवं कृतित्व : सामान्य परिचय	दूसरा सप्ताह	

	4.2 सर्वेश्वरदयाल सक्सेना तथा केदारनाथ सिंह की काव्यगत विशेषताएँ	तीसरा सप्ताह	
	4.3 सर्वेश्वरदयाल सक्सेना : कविताएँ - मैंने कब कहा, हम ले चलेंगे	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	4.4 केदारनाथ सिंह : कविताएँ - रचना की आधी रात	तीसरा सप्ताह	
	फर्क नहीं पड़ता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	पाठ्यक्रम की पुनरावृत्ति	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21  
कक्षा - कला स्नातक तृतीय वर्ष (GE-1)  
विषय - आधुनिक भारतीय साहित्य (HIND307)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	
	इकाई - 1 1.1 स्वाधीनता संग्राम और भारतीय नवजागरण	दूसरा सप्ताह	
	नवजागरण का भारतीय साहित्य पर प्रभाव	तीसरा सप्ताह	
	1.2 भारतीय साहित्य और राष्ट्रीयता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	इकाई - 2 2.1 महात्मा गांधी का भारतीय साहित्य पर प्रभाव	पहला सप्ताह	
	इकाई - 2 महर्षि अरविंद का भारतीय साहित्य पर प्रभाव	दूसरा सप्ताह	
	2.2 मार्क्सवाद का भारतीय साहित्य पर प्रभाव	तीसरा सप्ताह	
	अस्तित्ववाद का भारतीय साहित्य पर प्रभाव	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	इकाई - 3 3.1 अनन्तमूर्ति : संस्कार उपन्यास	पहला सप्ताह	
	संस्कार उपन्यास	दूसरा सप्ताह	
	संस्कार उपन्यास	तीसरा सप्ताह	
	संस्कार उपन्यास	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्टूबर	3.2 रवीन्द्रनाथ टैगोर : गीतांजलि 1. वन्दना, 2. परिचय, 3 वरदान	पहला सप्ताह	
	4. अरुण किरण, 5. सागर में	दूसरा सप्ताह	

	ज्वार, 6. रात्रि परीक्षा		
	शरत् सुन्दरी, 8. आषाढ की संध्या, 9 दिन ढल गया	तीसरा सप्ताह	
		चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	10. प्रिय व्यथा, 11. निर्झर, 12. अखण्ड आशा	पहला सप्ताह	
	13. प्रकाश पुण्य, 14. रक्षा बन्धन, 15. सम्मान	दूसरा सप्ताह	
	16. वसन्त, 17. अकेला दीप, 18. मैं हार गई	तीसरा सप्ताह	
	मैं हार गई, 19. एक बार, 20. गीत-सुधा	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	इकाई - 4 4.1 विजय तेन्दुलकर : घासीराम कोतवाल	तीसरा सप्ताह	
	घासीराम कोतवाल	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	घासीराम कोतवाल	दूसरा सप्ताह	
	घासीराम कोतवाल	तीसरा सप्ताह	
	घासीराम कोतवाल	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

अनंतिम शिक्षण/पाठ योजना सत्र 2020-21

कक्षा - कला स्नातक तृतीय वर्ष (GE-2)

विषय - सर्जनात्मक लेखन के विविध क्षेत्र (HIND308)

मास	इकाई / अध्याय / विषय	सप्ताह / दिन	विशेष
जुलाई	विषय और पाठ्यक्रम पर चर्चा	पहला सप्ताह	

	इकाई - 1 1.1 रिपोर्टाज़: अर्थ, स्वरूप	दूसरा सप्ताह	
	रिपोर्टाज़ एवं अन्य गद्य रूप	तीसरा सप्ताह	
	रिपोर्टाज़ और फीचर लेखन- प्रविधि	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अगस्त	1.2 फीचर लेखन : विषय-चयन	पहला सप्ताह	
	सामग्री-निर्धारण, लेखन-प्रविधि	दूसरा सप्ताह	
	सामाजिक, आर्थिक, सांस्कृतिक, विज्ञान से सम्बद्ध विषयों पर फीचर लेखन।	तीसरा सप्ताह	
	पयार्वरण, खेलकूद से सम्बद्ध विषयों पर फीचर लेखन।	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
सितंबर	इकाई - 2 2.1 साक्षात्कार (इण्टरव्यू/भेंटवार्ता)	पहला सप्ताह	
	उद्देश्य, प्रकार	दूसरा सप्ताह	
	साक्षात्कार प्रविधि, महत्त्व	तीसरा सप्ताह	
	2.1 स्तंभ लेखन : समाचार पत्र के विविध स्तंभ	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
अक्तूबर	स्तंभ लेखन की विशेषताएँ	पहला सप्ताह	
	समाचार पत्र और सावधि पत्रिकाओं के लिए समसामयिक, ज्ञानवर्धक और मनोरंजक सामग्री का लेखन	दूसरा सप्ताह	
	सप्ताहांत अतिरिक्त सामग्री और परिशिष्ट	तीसरा सप्ताह	
	इकाई - 3 3.1 दृश्य-सामग्री - छायाचित्र, कार्टून	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
नवंबर	रेखाचित्र, ग्राफिक्स आदि से	पहला सप्ताह	



	संबन्धित लेखन		
	इकाई - 4 4.1 बाजार, खेलकूद, फिल्म	दूसरा सप्ताह	
	पुस्तक और कला समीक्षा	तीसरा सप्ताह	
	4.2 आर्थिक पत्रकारिता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
दिसंबर	गृह-परीक्षाएँ	पहला सप्ताह	
	गृह-परीक्षाएँ	दूसरा सप्ताह	
	खेल पत्रकारिता	तीसरा सप्ताह	
	ग्रामीण और विकास पत्रकारिता	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
फरवरी	फोटो पत्रकारिता	दूसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	तीसरा सप्ताह	
	पाठ्यक्रम की पुनरावृत्ति	चौथा सप्ताह	
		माह के अंतिम दिवस	पुनरावृत्ति व मौखिक परीक्षा / ट्यूटोरियल
मार्च	पुराने प्रश्नपत्रों पर चर्चा	पहला सप्ताह	
	पुराने प्रश्नपत्रों पर चर्चा	दूसरा सप्ताह	अंतिम परीक्षाओं की तैयारी
	अंतिम परीक्षाएँ		

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 3<sup>rd</sup> YEAR**

**SUBJECT-MODERN AND CONTEMPORARY WORLD HISTORY :1871-1919**

<b>UNIT-1</b>	<b>TOPIC</b>	<b>DETAIL</b>	<b>MONTH</b>	<b>REMARKS</b>
	Introductory	Modern and contemporary history: main characteristic Emergence of Italy and Germany as unified nations Europe hegemony and inter -imperialist rivalries Conflicts within Europe Alliance formation, social tension and socialist movements	July-Aug 2019 (8 weeks)	
<b>UNIT-2</b>	The emergence of USA after the civil war	Japan emergence as a world power: modernization and Economic progress under the meiji restoration, Sino Japanese War. Nationalist movements in Asia: rise of Kuomintang and the Fall of Manchus and its aftermath Ottoman empire and the Arab world: accession of sultan Abdelhamid and the young ottoman movement young Turk revolution of 1905	Sep-Nov 2019 (10 weeks)	
<b>UNIT-3</b>	The end of the czarist regime in Russia	Russo- Japanese war of 1904-05 and its consequences Revolution of 1905 Towards Bolshevik revolution: February -march revolution The oct revolution of 1917 and the socio-economic foundation of a socialist state	Nov-Feb 2019 (8weeks)	
<b>UNIT-4</b>	The first world war and its aftermath	New grouping of European states Anglo-German rivalries Causes, events and results of the war The war settlements :economic and social consequences	Feb-Mar 2020 (6 weeks)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 3<sup>rd</sup> YEAR**

**SUBJECT--MODERN AND CONTEMPORAY WORLD HISTORY :1919-1992**

<b>UNIT-1</b>	<b>TOPIC</b>	<b>DETAIL</b>	<b>MONTH</b>	<b>REMARKS</b>
	From the peace settlement to 1939	Versailles to Locarno treaties, their political consequences The league of nation USA and USSR Era of the great depression of 1929	July-Aug 2019 (8 weeks)	
<b>UNIT-2</b>	The end of peace	the second world war: origin wartime diplomacy and the defeat of the totalitarian state nationalist movement and decolonization the emergence of new world order: UNO, aims and objectives	Sep-Nov 2019 (9weeks)	
<b>UNIT-3</b>	The world since 1949	Towards Chinese revolution of 1949 The cold war and its ideological and political origins Impact of the cold war: Europe, Korea, Vietnam, Cuban crises Military alliances: NATO, SEATO, CENTO, warsa pact	Nov-Dec 2019 (7 weeks)	
<b>UNIT-4</b>	Social condition and issues after the post-colonial world	Concept of globalisation Feminist and ecological movements The question of human rights Non-aligned movement: origin, agenda and achievements	Feb-Mar 2019 (7 weeks)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 2nd<sup>T</sup> YEAR**

**SUBJECT-HISTORY OF INDIA, c1206-1707**

UNIT-1	TOPIC	DETAIL	MONTH	REMARKS
	Foundation, expansion and consolidation of the sultanate of delhic.13 <sup>th</sup> to 15 <sup>th</sup> century.	Expansion iquta system; administrative And economic reforms,	July (2 weeks)	
	Religion political formations	Vijayanagar and Bahmani kingdoms	July (2weeks)	
<b>UNIT-2</b>	Second Afghan state	Administration of Shersha and revenue reforms	Aug (1 week)	
	Socio-religious movement: bhakti and Sufi	Nathpanthis, popular monotheism and Vaishnavism in north India Main Sufi Silsila's in India: chisti and Suhrawardi.	Aug-Sep (7weeks)	
<b>UNIT-3</b>	Foundation, expansion and consolidation of the Mughal state, c.16 <sup>th</sup> to 17 <sup>th</sup> century.	Expansion and consolidation: mansabdari And jaghirdar; imperial ideology: assessment Of Aurangzeb policies	Oct-Nov (8weeks)	
	Art and architecture in medieval India	Qutab complex Vijayanagar (hampi) Fatehpur Sikri; Mughal miniature paintings.	Dec (3 weeks)	
<b>UNIT-4</b>	17 <sup>th</sup> century transitions	Marathas Sikh's.	Dec (1week)	
	Disintegration and decline of the Mughal empire	Difference theories of Mughal decline (Hindu reaction, great firm theory, agrarian Crises jagirdari crises, region centric approach cultural failure and others.	Feb-Mar (8 weeks)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 2nd<sup>T</sup> YEAR**

**SUBJECT-HISTORY OF INDIA ,1707-1950**

UNIT-1	TOPIC	DETAIL	MONTH	REMARKS
	India in the 18 <sup>th</sup> century	Society, economy, polity and culture.	July (1 week)	
	Expansion and consolidation of British power	Bengal maysore and Maratha.	July (1week)	
UNIT-2	Making of a colonial economy	Land revenue settlement: permanent Ryotwari, and mahal Wari. De-industrialisation; commercialisation of agriculture.	July (2week)	
	Socio-religious reforms movement in the 19 <sup>th</sup> century	Raja ram Mohan Roy and brahma samaj, Dayanand and Arya samaj, Ishwar chander Vidhya Sagar and widow remarriage; Jyotiba Phule and Satya shodhak samaj, Sayed Ahmad khan and Aligarh movement Caste questions: Phule Narayan guru and Ambedkar.	Aug-Sep (8 weeks)	
UNIT-3	Popular resistance	The uprising of 1857 Peasant resistance to colonial rule: Santhal uprising (1856); indigo rebellion (1860); Pabna agrarian league (1873) Deccan riots (1875)	Oct-Nov (5weeks)	
	Nationalist politics,1858-1947	Foundation of the INC Moderates and radicals in the Indian national movement Revolutionary movement for Indian independence ideas and contributions of bhagat Singhs and veer Savarkar. Mahatma Gandhi and mass nationalism Gandhian thought techniques and movements.	Nov-Dec (7 weeks)	
UNIT-4	Growth of communal politics and the partion of India	Resettlement of refugee and issue with Pakistan; integration of the Indian staes: hydrabad Junagarh and Kashmir. Independence Indian constitution and its Main features and the establishment of the republic.	Feb-Mar (5 weeks)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 1<sup>ST</sup> YEAR**

**SUBJECT-HISTORY OF INDIA FROM THE EARLIEST TIMES UPTO C.300CE**

UNIT-1	TOPIC	DETAIL	MONTH	REMARKS
	Sources and interpretation	Archaeological source's, religious Literature, Secular literature, On Indian resources.	July 2019 (2 week)	
	Changing interpretation of early Indian history	Indian tradition of history writing, early foreigners, imperialist historiography, nationalist approach, Marxist school of history.	July 2019 (2week)	
	Survey of palaeolithic, Mesolithic and Neolithic culture	Palaeolithic beginnings, Mesolithic culture, origin of rock art.	Aug 2019 (1week)	
UNIT-2	Harappan Civilization	Origin extent, urban feature, town planning, economy, society, and religion art, scripts, decline.	Aug 2019 (2week)	
	Vedic culture	Polity, economy, society and religion.	Aug 2019 (1 week)	
	Beginning of the iron age and megalithic culture		Sep 2019 (4 week)	
UNIT-3	Emergence of Mahajan pada	Territorial states, rajay ganas/sangha	Oct 2019 (2week)	
	Magadha expansion	Rise of Magadha empire, cause of Magadha success	Oct 2019 (2week)	
	Buddhism and Jainism	Causes of origin, life, doctrine, main Teaching, growth, comparison of Buddhism and Jainism.	Nov 2019 (4week)	
UNIT-4	The Mauryan empire	State and administration, economy Ashoka's dharma, and architecture.	Dec 2019 (4week)	
	Post Mauryan age	Sunga, satvahana, kushana: polity, economy Society art	Feb 2020 (2week)	
	Sangam age	Polity economy and society.	Feb-Mar 2020 (3week)	

**NOTE- Assignment's, class test and midterm will be taken during this session**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 1<sup>ST</sup> YEAR**

**SUBJECT-HISTORY OF INDIA, C.300-1206**

<b>UNIT-1</b>	<b>TOPIC</b>	<b>DETAIL</b>	<b>MONTH</b>	<b>REMARKS</b>
	The Gupta and Vakatakas	State and administration, economy, society, Religion, art, literature, science and technology, during Gupta period.	July 2019 (4week)	
<b>UNIT-2</b>	Towards the early medieval	Changes in society, polity, economy culture, With special reference to Pallava and Chola.	Aug 2019 (4week)	
	Evolution of the political structure	Rashtrakuta, Palas, Pratiharas; economy religion and cultural developments.	Sep 2019 (4week)	
<b>UNIT-3</b>	Harsha and his time	Harsha kingdom, administration, Buddhism And Nalanda.	Oct 2019 (4week)	
	The Cholas	State and administration, economy, and culture	Nov 2019 (2week)	
<b>UNIT-4</b>	Emergence of Rajput states in northern India	Socio-economy foundations	Nov 2019 (2week)	
	The Arabs	The Ghaznavid in the northwest Establishment of the Delhi sultanate; overland And maritime trade	Dec 2019 (4week)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B. A2nd YEAR**

**SUBJECT-HISTORICAL TOURISM**

<b><u>UNIT-1</u></b>	<b><u>TOPIC</u></b>	<b><u>MONTH</u></b>	<b><u>REMARKS</u></b>
	Defining tourism and heritage. Historical tourism, types of tourism, meaning of heritage, art, and, architecture During Indus, Mauryan art and architecture, post Mauryan period architecture, Architecture during Kishana's, Gupta, Delhi sultanate, architecture during Sher shah suri, architecture during Mughal period, colonial architecture, sculpture in India, History of paintings in India.	July 2019 To Aug 2019  (Last 3 days Per week)	
	art and architecture in India: an overview		
<b><u>UNIT-2</u></b>	Understanding built heritage Temple architecture: kandariya Mahadev temple khajurao stupa architecture: Sanchi, the stupa of bhaurat, the stupa of Amravati. Indo-Persian architecture: Taj mahal; red fort, Delhi	Sep 2019 to Oct2019  (Last 3 days per week)	
<b><u>UNIT-3</u></b>	Temple architecture in HP as tourist attractions: a study of chamba kangra And mandi.	Nov2019 to Dec2019	
	Colonial architecture: Shimla	(Last 3 days per week)	
<b><u>UNIT-4</u></b>	Tourism in HP	Feb 2020 to Mar2020	
	Popular tourist destinations: Shimla, kullu-mandi and beyond	(Weekly test)	



**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B.A 2<sup>nd</sup> YEAR**

**SUBJECT-AN INTRODUCTION TO ARCHAEOLOGY**

UNIT- 1	TOPIC	MONTH	REMARKS
	Archaeology in India: origin and development Managing archaeological evidence: documentation codification, classification and analysis; findings and publications	July 2019 To Aug 2019  (Last 3 days Per week)	
UNIT- 2	Discovering human experience through archaeology: environment, technology, subsistence Society, trade and ways of thinking	Sep 2019 to Oct2019  (Last 3 days per week)	
UNIT- 3	Numismatics and epigraphic sources: significance and limitation A case study of the coins of audambars and kunidas (from the region of hp)	Nov2019 to Dec2019  (Last 3 days per week)	
UNIT- 4	Method of surveying and techniques of excavation A study of the Harapan sites of kalibangan and rakhigarhi A survey of the archaeology sites of himachal Pradesh: a case study of kot kangra or Nagarkot (kangra)	Feb 2020 to Mar 2020 (last 3 days per week)	

**NOTE- Assignment's, class test and midterm will be taken during this session.**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B. A3rd YEAR**

**SUBJECT-INDIAN HISTORY AND CULTURE**

UNIT-1	TOPIC	MONTH	REMARKS
	Environment; culture, tradition and practices Historical overview Oral and codified information on medicinal plants Water and water bodies	July 2019 To Aug 2019  (Last 3 days Per week)	
UNIT-2	Urbanisation and urbanism Issue of settlements and landscapes Social differentiations Communication networks	Sep 2019 to Oct2019  (Last 3 days per week)	
UNIT-3	Social inequality and gender; States within household: an overview Present context Issue of violence Employ, distribution of resources	Nov2019 to Dec2019  (Last 3 days per week)	
UNIT-4	Cultural heritage Main components Built heritage Fairs and festivals	Feb 2020 to Mar 2020 (Last 3 days per week)	

**NOTE- Assignment's, class test and midterm will be taken during this session**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B. A3rd YEAR**

**SUBJECT-INTRODUCTION TO INDIAN ART**

UNIT-1	TOPIC	MONTH	REMARKS
	Understanding key terms in art appreciation: art craft, sculpture, relief, painting, Miniature, mural, fresco, rangoli, folk art	July 2019 To Aug 2019  (Last 3 days Per week)	
UNIT-2	Indian sculpture Iconography: Hindu, Buddhism, and jaina	Sep 2019 to Oct2019  (Last 3 days per week)	
UNIT-3	Archeature Temple archeature: nagara, Dravid and vesara Mosques and mausoleums' complex; Humayun tomb; Jama masjid; Taj mahal	Nov2019 to Dec2019	
	Rock- cut temple of Masrur and colonial architecture in Shimla	(Last 3 days per week)	
UNIT-4	Indian painting: understanding it historically Mural painting: Ajanta Mughal: miniature styles Pahari school of painting: guler-kangra painting	Feb 2020 to Mar 2020 (Last 3 days per week)	

**NOTE- Assignment's, class test and midterm will be taken during this session**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 2020**

**B. A3rd YEAR**

**SUBJECT-SOCIAL-RELIGIOUS REFORMS MOVEMENT IN INDIA (19<sup>TH</sup> AND 20<sup>TH</sup>CENTURY)**

<b>UNIT-1</b>	<b>TOPIC</b>	<b>MONTH</b>	<b>REMARKS</b>
	Background and causes of the reform movement Hindu reform movements-nature and significance: brahma samaj, Prathama samaj Arya samaj Ramakrishna movement and theosophical movement.	July 2019 To Aug 2019  (Last 3 days Per week)	
<b>UNIT-2</b>	Muslim reform movements-nature and significance: Wahabi /Waliullah, fairazi Ahmadiyya, Aligarh, and deoband school	Sep 2019 to Oct2019  (Last 3 days per week)	
<b>UNIT-3</b>	Women and social reforms: prohibition of sati, infanticide, child marriage, widow Remarriage, women education and legislative measures for women	Nov2019 to Dec2019  (Last 3 days per week)	
<b>UNIT-4</b>	Caste system: movements against caste system and ideas of social reforms and Reconstruction with reference to Jyotiba Phule, Narayan guru, Gandhi and Ambedkar.	Feb 2020 to Mar 2020 (Last 3 days per week)	

**NOTE- Assignment's, class test and midterm will be taken during this session**

**L.B.S. GOVT.P.G. COLLEGE SARASWATI NAGAR SAWRA SHIMLA (HP)**

**TEACHING PLAN FOR THE SESSION OF JULY 2019 TO APRIL 202**

**B.A 3<sup>RD</sup> YEAR**

**HISTORY OF HIMACHAL PRADESH 1815-1972**

<b>UNIT-1</b>	<b>TOPIC</b>	<b>DETAIL</b>	<b>MONTH</b>	<b>REMARKS</b>
	Political conditions of the region during Gurkhas invasion	<ul style="list-style-type: none"><li>. introduction: himachal hill states in the early 19<sup>th</sup> century.</li><li>. The Gurkha invasion</li><li>. process of repulsion: British and the Gurkha's Importance of the treaty of segauli.</li><li>. consequences of the anglo-gorkha war of (1814-15)</li></ul>	July-Aug 2019 (5weeks)	
<b>UNIT-2</b>	The establishment of the British paramountcy	<ul style="list-style-type: none"><li>. Himachal under the British: recognition of the 'hill states'</li><li>. grant of sands and territorial aggression</li><li>. British political and administrative policies</li><li>. the process of penetration and mechanisms of control;</li><li>. resistance to British rule: struggle of wazir ram Singh pathania and an analysis of his trial</li></ul>	Aug-Sep 2019 (8 week)	
<b>UNIT-3</b>	The beginning of the uneasy calm	<ul style="list-style-type: none"><li>. 1857 and himachal</li><li>. popular protest and social reform movement in HP from (1839-1948) agitations against the British and the hill rajas.</li><li>. the question of beggar, Beth, dhoom, juga, reet and barada-faroshi</li><li>. praja Mandal movements</li><li>. dhama goli kand, pajhota andolan and suket satyagraha.</li></ul>	Oct-Dec 2019 (10 week)	

<b>UNIT-4</b>	The idea of himachal Pradesh	<ul style="list-style-type: none"> <li>. The birth of modern himachal, 1948-71: party Politics.</li> <li>. Dawn of democratic institutions: chief commissioner</li> <li>. Province, part 'C' state and union territory (legislative Assembly-territorial council-legislative assembly)</li> <li>. contribution of Dr.Y. S Parmar in the development of hill areas.</li> <li>Socio-economic changes in modern himachal</li> <li>. land reform in HP: abolition of big landed estates and land reforms act ,1953 and ceiling Of land holding bill ,1972</li> </ul>	Dec -mar 2019  (10 week)	
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# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2021-2022

Class: B.A. 1<sup>st</sup> Year

For The Month: July 2021

Name of Teacher: Asst. Prof. Dr. Rohit Mokta

Subject: Music Vocal

Course Title: Hindustani Music Paper – III Theory (Unit-I)

Course Code: MUSA201TH

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical & Tutorials	Assignments / Seminar / Quiz Etc.	Class Test / Mid Term Examination & Term End Examination
1.	<b>General Discussion and Definition of the of the following terms:</b> A. Khyal, Maseetkhani – razakhani gat, Dhruwad,Tarana, Meend, Soot,Murki, kan, Khatka,Krintan, Harmony,Melody.	03	03	Introductive Discussion	–
2.	B. Comparative study of Bhatkhande & Vishnudigamber Paddhati (Notation System). C. Writing of Talas & Composition in Notation.	03	03	Assignment	Class Test
3.	D. <u>Detailed study of Ragas:</u> <b>Raga-</b> Maru-Bihag,Malkauns, Vrindavani Sarang <b>Tala-</b> Teental and Dadra.	03	03	Seminar	–
4.	E. Essay, shastriya Sangeet (Classical Music) & Sugam Sangeet (Light Music)	02	04	Quiz Competition	–

Name of Teacher: **Asst. Prof. Dr. Rohit Mokta**

Signature.....

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2021-2022

**Class: B.A. 2<sup>nd</sup> Year**

**For The Month: July 2020**

**Name of Teacher: Asst. Prof. Dr. Rohit Mokta**

**Subject: Music Vocal**

**Course Title: Hindustani Music Paper – III Practical (Unit-II)**

**Course Code: MUSA202PR**

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical & Tutorials	Assignments / Seminar / Quiz Etc.	Class Test / Mid Term Examination & Term End Examination
1.	<b>Practical Class:</b> <b>1. Raag Maru – Bihag .</b> Alaap and Maseet Khani gat with taan and tode.	06	06	Introduction with students, Demonstration.	–
2.	B. Raag Maru – Bihag Razakhani Gat with taan and tode.	06	06	Lecture Cum Demonstration.	Performance (Stage)
3.	<b>1. Raag Malkauns.</b> Complete Introduction and razakhani gat in teen taal.	06	06	Demonstration	–
4.	<b>Revision and Practice of the all.</b>	06	06	Sitar / Singing Competition in Class Room.	–

Name of Teacher: **Asst. Prof. Dr. Rohit Mokta**

Designation: Assistant professor Music (v)

Signature.....



# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2021-2022

Class: B.A. 3<sup>rd</sup> Year.

For The Month: July 2021

Name of Teacher: Asst. Prof. Dr. Rohit Mokta

Subject: Music Vocal

Course Title: Hindustani Music Paper – I(DSE – 1A)

Course Code: MUSA307 TH

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical & Tutorials	Assignments / Seminar / Quiz Etc.	Class Test / Mid Term Examination & Term End Examination
1.	<b>Essay on the following Topics:</b> A. Folk Music of Himachal Pradesh. B. Modern trends in Music. 2. The relevance of time theory in Hindustani Classical Music. 3. Biographies of Musicians: A. Pt. Bheem Sen Joshi B. Lata Mangeshkar	06	01	Introductory Discussion	–
2.	<b>Study of the following:</b> 2. Study of Gram, Murchanna and Jati as treated in Natya shastra and its relevance in present context. 3. Musical reference found in Ramayana and Mahabharata.	06	01	Assignment	Class Test
3.	<b>Discuss the following:</b> a. Avirbhav and Tirobhav b. Gayak ke Gun Avagun c. Margi – Desi d. Taal and its 10 Prans.	06	01	Seminar	–
4.	<ul style="list-style-type: none"><li>• Basic knowledge of stringed instrument used in Hindustani Classical Music.</li><li>• Write the Theka of Teen taal along with dugun, teegun and Chaugun.</li><li>• Make a diagram of Taanpura / Sitar and level its sections.</li></ul>	06	01	Quiz Competition	Class Test –

Name of Teacher: Asst. Prof. Dr. Rohit Mokta

Signature.....

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2021-2022

Class: B.A. 3<sup>rd</sup> Year.

For The Month: July 2021

Name of Teacher: Asst. Prof. Joginder Singh

Subject: Music Vocal

Course Title: Hindustani Music DSE – 1A Practical (Unit-2)

Course Code: MUSA 308PR

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical & Tutorials	Assignments / Seminar / Quiz Etc.	Class Test / Mid Term Examination & Term End Examination
1.	<b>Practical</b> <b>Raag:</b> <b>1. Todi</b> Alaap, Jor , Jhalla, Maseetkhani gat, Razakhani gat with taan and thode.	06	06	Introduction with students, Demonstration.	–
2.	<b>Revision and Practice of the all.</b>	06	06	Lecture Cum Demonstration.	Performance (Stage)
3.	<b>Practical</b> <b>Raag:</b> <b>2. Bhairavi</b> Complete Introduction and razakhani gat in teen taal.	06	06	Demonstration	–
4.	<b>Practical</b> <b>Raag:</b> <b>3. Darbari - Kanahda</b> Complete Introduction and razakhani gat in Ek Taal.	06	06	Sitar / Singing Competition in Class Room.	Performance (Stage)
5.	<b>Practical</b> <b>Taal:</b> <b>Teentaal, Ektaal, Chautal, Dhamar Roopak, Keherva and Dadra taal.</b>	06	06	Demonstration	–

Name of Teacher: **Asst. Prof. Dr. Rohit Mokta**

Signature.....

**Lecture Plan (2020-21)**

**Lecture Plan BA I Year (July-2020)  
Introduction to Philosophy – 1 (Paper I)  
PHIL-A-101 cc**

Units	Contents	Week wise Distribution	Remarks
Unit I	Definition and Meaning of Philosophy	1 <sup>st</sup> week of July Tutorial : Assignment	
	Nature – Philosophy as Method Philosophy as Activity	2 <sup>nd</sup> week of July Tutorial : Class Test	
	Scope Relevance (Uses)	3 <sup>rd</sup> week of July Tutorial : Assignment	
	Its relation with Science, Religion and Common Sense	4 <sup>th</sup> week of July Tutorial: Quiz 1 <sup>st</sup> week of August Tutorial: Seminar	
Unit II	<u>Branches of Philosophy</u>	2 <sup>nd</sup> week of August Tutorial : Seminar	Expect to complete 50% syllabus by last week of August
	Metaphysics and its main problems	3 <sup>rd</sup> week of August Tutorial : Class Test	
	Epistemology and its main Problems	4 <sup>th</sup> week of August Tutorial : Ppt Presentation	
Unit III	<u>Plato</u> Main Dialogues Theory of Knowledge	1 <sup>st</sup> week of September Tutorial : Ppt Presentation	
	Doctrine of Ideas	2 <sup>nd</sup> week of September Tutorial: Class Test	
Unit IV	<u>Aristotle</u> Criticism of Plato's Doctrine of Ideas	3 <sup>rd</sup> & 4 <sup>th</sup> week of September Tutorial : Group Discussion	3 <sup>rd</sup> week of October - Revision
	Causality/Change	1 <sup>st</sup> week of October Tutorial: Assignment	
	Matter and Form	2 <sup>nd</sup> week of October Tutorial : Quiz	

**Lecture Plan BA I Year (Paper II)**  
**Indian Philosophy-1**  
**PHIL-A-102 cc**

Units	Contents	Week wise Distribution	Remarks
Unit I	Meaning of Darshana Origin and Nature of Darshana	3 <sup>rd</sup> & 4 <sup>th</sup> week of October Tutorial : Assignment	
	Classification of Indian Philosophy	1 <sup>st</sup> week of November Tutorial : Class Test	
	Characteristics of Indian Philosophy Distinction between Indian Philosophy and Western Philosophy	2 <sup>nd</sup> week of November Tutorial : Assignment	
Unit II	<u>Vedic Darshana</u> – Rta, Rna	3 <sup>rd</sup> week of November Tutorial: Quiz	Expect to complete 50% syllabus by 1 <sup>st</sup> week of December
	Nasdiya Sukta	4 <sup>th</sup> week of November Tutorial : Seminar	
	Purusha Sukta Hiranyagarbha Sukta	1 <sup>st</sup> week of December Tutorial : Class Test	
Unit III	<u>Upanishads</u> Brahman, Atman and their non identity	3 <sup>rd</sup> & 4 <sup>th</sup> week of December Tutorial : Ppt Presentation	House exam likely to be held in 2 <sup>nd</sup> week of December
Unit IV	<u>SrimadBhagvadGita</u> Jnana – Yoga	2 <sup>nd</sup> week of February Tutorial: Class Test & Assignment	Revision in the month of March
	Karma – Yoga	3 <sup>rd</sup> week of February Tutorial : Group Discussion	
	Bhakti – Yoga Sthit Prajya	4 <sup>th</sup> week of February Tutorial: Quiz	

**Lecture Plan BA II Year (July-2020)**  
**Indian Philosophy -2 (Paper I)**  
**PHIL 203cc**

Units	Contents	Week wise Distribution	Remarks
Unit I	Prama, Aprama and Six Pramanas	1 <sup>st</sup> & 2 <sup>nd</sup> week of July Tutorial: Assignment Class Test	
	Ek Tatvavad, Dvitatvavadqa& Bahu tatvavad	3 <sup>rd</sup> week of July Tutorial :Assignment	
Unit II	<u>Carvaka</u> Epistemology Metaphysics Ethics	4 <sup>th</sup> week of July 1 <sup>st</sup> & 2 <sup>nd</sup> week of August Tutorials :Class Test Seminar Seminar	Expect to complete 50% syllabus by 2 <sup>nd</sup> week of August
Unit III	<u>Jainism</u> Nature and Classification of Reality Nayavad Syadvad Anekantavad Kaivalya	3 <sup>rd</sup> & 4 <sup>th</sup> week of August 1 <sup>st</sup> week of September Tutorial : Ppt Presentation Class Test	
Unit IV	<u>Buddhism</u> Four Noble Truths Eight fold path Pratityasamutpad Ksanikavad Anatmavad Nirvana	2 <sup>nd</sup> & 4 <sup>th</sup> week of September 1 <sup>st</sup> &2 <sup>nd</sup> week of October Tutorial: Assignment Group Discussion Quiz	Revision

**Lecture Plan BA II Year (Paper II)**  
**Indian Philosophy -3**  
**PHIL-A-204cc**

Units	Contents	Week wise Distribution	Remarks
UNIT I	Nyaya Pramanas :Pratyaksha, Anumana, Sabda,Upamana, Arthapatti, Abhava  Vaishesika :Saptadartha : Dravya, Guna, Karma, Samanya, Vishesa,Samvaya, Abhava	3 <sup>rd</sup> & 4 <sup>th</sup> week of October 1 <sup>st</sup> week of November Tutorial : Assignment Class Test  2 <sup>nd</sup> & 3 <sup>rd</sup> week of November Tutorial : Class Test	
UNIT II	Samkhya :Purusha,Prakriti, Satkaryavada, Vikasvada, Kaivalya Yoga :Citta, Chittavritti, Kleshas, Samadhi, Ashtanga Yoga, Kaivalya	4 <sup>th</sup> week of November 1 <sup>st</sup> week of December Tutorial : Seminar  3 <sup>rd</sup> & 4 <sup>th</sup> week of December Tutorial: Quiz	Expect to complete 50% syllabus by 4 <sup>th</sup> week of December House Exam likely to be held in 2 <sup>nd</sup> week of December
UNIT III	Mimansa : Dharma, Apporva, Sabadartha, PramanaVichar Advaita Vedanta of Samkaracharya : Criteria of Sat- Asat	1 <sup>st</sup> & 2 <sup>nd</sup> week of February Tutorial: Ppt Presentation 3 <sup>rd</sup> & 4 <sup>th</sup> week of February Tutorial : Group Discussion	
UNIT IV	Vishishtadvaita of Ramanuja: Brahman,Maya, Jagat, Prapti, Mukti	1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> week of March Tutorial : Assignment Class Test Quiz	Revision

**Lecture Plan BA III (July-2020)**  
**Western Philosophy- 1 (Paper I)**  
**PHIL-A 309 DSE**

Units	Contents	Week wise Distribution	Remarks
Unit I	<u>Theories of Truth</u> Coherence	1 <sup>st</sup> & 2 <sup>nd</sup> week of July Tutorial : Assignment	
	Correspondence	3 <sup>rd</sup> week of July Tutorial : Class Test	
	Pragmatic	4 <sup>th</sup> week of July Tutorial : Assignment	
Unit II	<u>Theories of Knowledge</u> Rationalism	1 <sup>st</sup> week of August Tutorial: Quiz	Expect to complete 50% syllabus by 4 <sup>th</sup> week of August
	Descartes	2 <sup>nd</sup> week of August Tutorial : Seminar	
	Spinoza	3 <sup>rd</sup> week of August Tutorial : Class Test	
	Leibnitz	4 <sup>th</sup> week of August Tutorial : Ppt Presentation	
Unit III	<u>Empiricism</u>	1 <sup>st</sup> week of September Tutorial: Ppt Presentation	House exam likely to be held in 3 <sup>rd</sup> week of September
	Locke	2 <sup>nd</sup> week of September Tutorial: Quiz	
	Berkeley	4 <sup>th</sup> week of September Tutorial: Class Test & Assignment	
	Hume	1 <sup>st</sup> week of October Tutorial : Group Discussion	
Unit IV	<u>Immanuel Kant</u> Synthesis of Rationalism and Empiricism	2 <sup>nd</sup> week of October Tutorial: Quiz	Revision

**Lecture Plan BA III Year  
Western Philosophy – 2 (Paper II)  
PHIL -A-310 DSE**

Units	Contents	Week wise Distribution	Remarks
Unit I	Realism – Metaphysical & Epistemological  Idealism – Objective, Subjective and Absolute	3 <sup>rd</sup> & 4 <sup>th</sup> week of October 1 <sup>st</sup> week of November Tutorial : Assignment Class Test 2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> week of November Tutorials : Class Test Quiz Seminar	
Unit II	Materialism – Mechanical and Dialectical  Causality – Aristotle and Hume	1 <sup>st</sup> & 3 <sup>rd</sup> week of December  4 <sup>th</sup> week of December Tutorial : Ppt Presentation Ppt Presentation Class Test	Expect to complete 50% syllabus by 4 <sup>th</sup> week of November  House Exam likely to be held in 2 <sup>nd</sup> week of December
Unit III	Proof for the Existence of God Nature of God – Theism, Deism and Pantheism	1 <sup>st</sup> & 2 <sup>nd</sup> week of February 3 <sup>rd</sup> week of February Tutorial: Assignment Group Discussion Group Discussion Quiz	
Unit IV	Logical Positivism : Theory of Verification Elimination of Metaphysics Existentialism : Introduction and Main Characteristics	4 <sup>th</sup> week of February 1 <sup>st</sup> week of March 2 <sup>nd</sup> & 3 <sup>rd</sup> week of March Tutorial: Class Test Quiz	Revision



**Lecture Plan BA III Year (July 2020)**  
**Bhagwad Gita (Generic Elective) Paper I**  
**PHIL -A-311 DSE**

Units	Contents	Week wise Distribution	Remarks
UNIT I	Svabhava and Svadharma Nishkama karma Yoga	1 <sup>st</sup> & 2 <sup>nd</sup> week of July 3 <sup>rd</sup> & 4 <sup>th</sup> week of July Tutorial : Assignment Class Test Quiz	
UNIT II	Jnana Yoga Karma Yoga Bhakti Yoga	1 <sup>st</sup> week of August 2 <sup>nd</sup> & 3 <sup>rd</sup> week of August 4 <sup>th</sup> week of August Tutorial : Assignment Ppt Presentation	Expect to complete 50% syllabus by 4 <sup>th</sup> week of August
UNIT III	Lok Samgraha Sthitprajya	1 <sup>st</sup> week of September 2 <sup>nd</sup> & 4 <sup>th</sup> week of September Tutorials : Class Test Group Discussion	House Exam likely to be held in 3 <sup>rd</sup> week of September
UNIT IV	Contemporary relevance of the message of Bhagvad Gita	1 <sup>st</sup> & 2 <sup>nd</sup> week of October Tutorial : Class Test	Revision

**Lecture Plan BA III Year  
Yoga (Generic Elective) Paper II  
PHIL -A-312 GE**

Units	Contents	Week wise Distribution	Remarks
UNIT I	The definition and meaning of Yoga, Vritti, Klesha	3 <sup>rd</sup> & 4 <sup>th</sup> week of October 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> week of November Tutorials : Assignment Class Test Quiz Seminar	
UNIT II	Bahirangsadhan of Yoga : Yama, Niyama, Asana, Pranayama, Pratyahara	1 <sup>st</sup> & 3 <sup>rd</sup> & 4 <sup>th</sup> week of December Tutorial : Ppt Presentation Ppt Presentation Class Test	Expect to complete 50% syllabus by 4 <sup>th</sup> week of November  House Exam likely to be held in 2 <sup>nd</sup> week of December
UNIT III	Antarangsadhan of Yoga : Dharana, Dhyana, Samadhi	1 <sup>st</sup> & 2 <sup>nd</sup> & 3 <sup>rd</sup> week of February Tutorial: Assignment Group Discussion Group Discussion Quiz	
UNIT IV	Samadhi ka svaroop, Kaivalya	4 <sup>th</sup> week of February 1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> week of March Tutorial: Class Test Quiz	Revision

**TEACHING PLAN: B.A.FIRST YEAR POLITICAL SCIENCE july 2019 –april 2020)**

Academic quarterly	CLASS/YEAR	Topics to be covered	Name of teacher	No of lectures	Remedial/Tutorial	Remark
July	B.A .1 <sup>st</sup> year	<b>Paper :Introduction to political theory(pols101),UNIT-1</b> Tppic1.Development and definition of politic and political science Topic 2.political theory definition ,nature ,scope and its relevance	R.K.	4 weeks		
August		<b>Paper :Introduction to political theory unit - 2<sup>nd</sup></b> Topic 1.state:elements,origin and development Topic2. Concept of liberty Topic3. Concept of equality Topic 4.justice Topic 5. Concept of rights fundamental rights in Indian constitution.`		4 weeks		
Sept .		<b>Paper: Introduction to political theory unit - 3<sup>rd</sup></b> Topic 1.Democracy : meaning definition feature and merits or demerits of democracy Topic2 liberal and social perspective of development		4 weeks		
Oct .	B.A .1 <sup>ST</sup> YEA R	<b>Paper: Indian govt. and politics (POLS102) unit-1.</b> Topic 1. State and nature of Indian state Topic 2. Approaches : various approaches to study of Indian state Topic 3. Liberal ,Marxist and Gandhi an approaches to study of Indian politics		4 weeks		
Nov – DEC .		<b>Paper: Indian govt. and politics (POLS102) unit-2<sup>nd</sup></b> Topic 1.constitution :features of Indian constitution Topic 2. Fundamental rights in Indian constitution. Topic 3. Directive principles of state policy. Topic 4. Parliament, office of prime minister Topic 5.judiciary system ,organization power and function of supreme court		4 weeks		Mid - term

		Topic 6.power structure in India: caste, class and patriarchy.				
FEB		<b>Paper: Indian govt. and politics (POLS102) unit-3<sup>RD</sup></b> Topic 1. Religion and politics, Topic2 .Secularism , feature of Indian secular state Topic 3. Communalism and politics Topic 4. Party system in India		3 weeks		Se me ste r exa m.
MAR CH		<b>Paper :Introduction to political theory(pols101),UNIT-4<sup>th</sup></b> Topic 1. Protective discrimination in India and arguments for reservation, argument against the policy of reservation. Topic2 .State intervene in family.		4 weeks		
APRI L		<b>Paper: Indian govt. and politics (POLS102) unit-4<sup>th</sup></b> Topic 1. Social movement: workers movement in India Topic2. Peasants movement in INDIA Topic3. Environmental Topic4 women's movements and women's empowerment Topic 5. Strategies of development: planned economy and Neo-liberalism.		4 weeks		

**TEACHING PLAN: DEPARTMENT OF POLITICAL SCIENCE B.A2ND YEAR JULY(2019- APRIL20)**

Acad emic year	CLA SS/ YEA R	Topics to be covered	Nam e of teac her	No of lectu res	Remedial /Tutorial	Re ma rk
Jul.	B.A .3 <sup>RD</sup> Se me ster	<b>Paper: comparative Government and politics(pols301)UNIT-1</b> Tppic1.comparative politics: meaning and nature and scope Topic 2.Traditional and modern perspectives, utility and problem Topic.3 comparative method: meaning, nature scope and utility Topic 4 comparative analyses democratic and authoritarian regimes <b>Paper: Legislative support(pols 302)unit-1</b>		4 weeks	Unit test	

		<p>Topic: 1. Power and function of people' representative: Local government(rural and urban)</p> <p>Topic2. Originations Power and function of state legislature.</p> <p>Topic 3. Originations power and function of parliament</p>					
AUG		<p><b>Paper: Introduction to international relation (pols401) unit-1.</b></p> <p>Topic 1. Definition, nature and scope of International relations</p> <p>Topic 2. Approaches to study of International relations-classical realism (Hans Morgenthau)</p> <p>2)World systems approach (Immanuel Wallenstein)</p> <p>3)Dependency model(Andre Gander Frank)</p> <p><b>Paper: Public opinion &amp;survey research (POLS402) unit 1</b></p> <p>Topic 1.Publicopinion : Meaning and features</p> <p>Topic 2. Public opinion and democracy –role of public opinion in Democracy</p>					
SEP.	B.A . 3 <sup>RD</sup> Se me ster	<p><b>Paper: comparative Government and politics(pols301)UNIT-2</b></p> <p>Topic1. Classification of political system: parliamentary and presidential –UK and USA</p> <p>Topic2. Federal and Unitary –Canada &amp; china.</p> <p><b>Paper: Legislative support(pols302)unit-2</b></p> <p>Topic 1.Supporting the legislative process: how a Bill becomes an act</p> <p>Topic 2 Roll of standing committee in the making of law</p>		4 week s	Unit test		
OCT		<p><b>Paper: Introduction to international relation (pols401) unit-2</b></p> <p>Topic1. Cold war: meaning and nature of cold</p>					

		<p>war, cause of cold war</p> <p>Topic 2.various stages of cold war</p> <p>Topic 3.End of cold war.</p> <p><b>Paper: Public opinion &amp;survey research (POLS402) unit- 2</b></p> <p>Topic1.Representation and sampling: sampling meaning and definitions utility of sampling</p> <p>Topic 2. Types of sampling –random, non random and stratified sampling.</p> <p>Topic 3 merits and demerits of sampling.</p>					
NOV	B.A 3 <sup>RD</sup> Se me ster	<p><b>Paper: comparative Government and politics(pols301)UNIT-3</b></p> <p>Topic 1.Electoral system: First past the post system</p> <p>Topic2. Proportional representation</p> <p><b>Paper: Legislative support(pols302)unit-3</b></p> <p>Topic1. Legislative committees: Nature, role and type of committees</p>		4 week s	Unit test	MI D- TE RM	
DEC.		<p><b>Paper: Introduction to international relation (pols401) uni-3</b></p> <p>Topic1. Post cold war-End of cold war and new cold war</p> <p>Topic 2. War era and emerging centers power (European Union, China, Russia and Japan</p> <p><b>Paper: Public opinion &amp;survey research (POLS402) unit-3</b></p> <p>Topic 1. Understanding survey research :meaning and definition of interview ,types of interview</p> <p>Topic 2. Preparation of interview and process of interview , Merits and demerits of interview</p> <p>Topic3. Questionnaire method</p>				SE ME STE R EX M.	
MAR CH		<p><b>Paper: Introduction to international relation (pols401) uni-3</b></p> <p><b>Topic: Indian foreign policy (A) basic determinants (historical, geo-political, economic, domestic and strategic (b) policy</b></p>					

		<p><b>of NON-ALIGNMENT.</b></p> <p><b>Paper: Public opinion &amp; survey research (POLS402) unit-4</b></p> <p>Topic1 Quantitative data: Meaning, analysis and interpretation of data.</p> <p>Topic 2. Understanding the opinion poll and Exit polls.</p>				
APRIL	B.A . 3 <sup>rd</sup> semester	<p><b>. Paper: comparative Government and politics(pols301)UNIT-4</b></p> <p>Topic 1. Party system :one party, Bi-party and munity-party system</p> <p>Topic2. Welfare state : meaning definition of welfare state and functions of welfare state</p> <p><b>Paper: Legislative support(pols302)unit-4</b></p> <p>Topic 1. Reading the Budget document: Role of parliament in passing the union budget, raising for grants.</p>		4 weeks		

**TEACHING PLAN PLAN: DEPARTMENT OF POLITICAL SCIENCE B.A 3<sup>RD</sup> YEAR JULY(2019- APRIL 20**

**LBS COLLEGE SARASWATI NAGAR SAWRA**

Academic quarterly	CLASS/ YEAR	Topics to be covered	Name of teacher	No of lectures	Remedial /Tutorial	Remark
July	B.A .3 <sup>RD</sup> year	<p><b>Paper: Themes in comparative political theory(pols301) unit -1</b></p> <p>Topic 1. Meaning and definition of political thoughts Feature of Indian and Western political thought</p> <p>Topic2. Similarities and dissimilarities in Indian and Western political thought.</p> <p><b>Paper: Democratic awareness though legal literacy(POLS303) unit-1</b></p> <p>Topic1. Outlining the legal system in India: Criminal and civil courts</p> <p>Tpic2. Juvenile court, mahila courts. Role of Tribunals</p>	R.K.	4 WEEKS	UNIT TEST	
AUG		<p><b>Paper: Themes in comparative political</b></p>		4 WEE	UNIT TEST	

		<p><b>theory(pols301) unit -2<sup>nd</sup></b>  Topic 1. John lock view on rights  Topic2. J.S. Mill view on liberty.  <b>Paper: Democratic awareness though legal literacy(pols303) unit-2<sup>nd</sup></b>  Topic1.Understanding the application of law: Criminal jurisdiction, filing an FIR, Arrest, Bails search and seizure.  Topic2. Prevention of atrocities on scheduled castes and scheduled tribes.</p>		KS		
SEP.		<p><b>Paper: Themes in comparative political theory(pols301) unit -3<sup>rd</sup></b>  Topic1.Indian thought: Kautilya's views on state  Topic2. Tilak and Gandhi view on swaraj.  <b>Paper: Democratic awareness though legal literacy( pols303) unit-3</b>  Topic1. Dowry, sexual harassment and violence against women.  Topic2. Consumer rights and cybercrimes.</p>		4WE EKS	UNIT TEST	
OCT.	B.A .3 <sup>RD</sup> YEA R	<p><b>Paper: Democracy and Governance(pols302) unit-1</b>  Topic1. Structure and process of Governance.  (a) Union level: President, prime minister and supreme court.  (B) State level: Governor , chief minister and high court.  <b>Paper : Conflict and peace building (POL304)unit -1</b>  Topic1. Understanding conflict: Management, resolution and peace building</p>	R.K.	4 WEE KS	UNIT TEST	
NOV		<p><b>Paper: Democracy and Governance(pols302) unit-2</b>  Topic1. (A) Political communication: nature, forms and importance.  Topic 2 (b) Role of trade unions and farmers associations.  <b>Paper : Conflict and peace building (POL304)unit -2</b>  Topic1. Types of conflict: local, sub-national and international.</p>	R.K.	4 WEE KS	UNIT TEST	MI D- TE RM



DEC.		<p><b>Paper: Democracy and Governance(pols302) unit-3</b>  Topic:1. Contemporary Political Economy-Liberalization.  Topic : 2. E-Governance.  <b>Paper : Conflict and peace building (POL304)unit-3</b>  topic 1-Levels of Conflicts :Local, Sub – National and International.</p>	R.K.	4 WEE KS	UNIT TEST	SE ME STE R EX M.
FEB.		<p><b>Paper: Themes in comparative political theory(pols301) unit -4</b>  Topic 1. Amberdkar and Lohia views on social justice  Topic2.Nehru views on democratic socialism.  Topic 3. Patel: Idea of national integration.</p> <p><b>Paper: Democratic awareness though legal literacy(POLS303) unit-4</b>  Topic 1. Functioning of legal system: legal services authorities act  Topic2. Preventive detention act and National security ac.</p>	R.K.  R.K.	3 WEE KS  3 WEE KS	UNIT TEST	
MAR CH						
APRI L		<p><b>Paper: Democracy and Governance(pols302) unit-4</b>  Topic1. Dynamics of civil society: New social movements (gender ,tribe , environment)  Topic 2. NGO's  <b>Paper : Conflict and peace building (POL304)unit -4</b>  Topic1. Methods to resolve conflict: Negotiations, Trust building and mediation .  Topic2. Track 1 and track 2 Diplomacy.</p>		4 WEE KS		

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-2021

### Public Administration Syllabus ( Regular)

#### BA – 1st Year)

Core Course

DSC:1A

Code PUBA 101-A

#### Course: Administrative Theory

Units	Name of Unit / Objective	No. Of Classes
1.	Public Administration : Meaning, Nature, Scope and Significance. Evolution of Public Administration. Public and Private Administration : Similarities and Dissimilarities. Public Administration as an Art and Science. Relationship of Public Administration with Political Science, Sociology and Economics. New Public Administration: New Public Management	15
2.	Principles of Organization:-: Hierarchy, Unity of Command, and Span of Control, .Centralization: Meaning, merits & demerits Decentralization: Meaning, merits & demerits Delegation: meaning, need, elements and hindrances Supervision: meaning, need and methods of supervision a) Authority and Responsibility	15
3.	Forms of Organization: Meaning, Elements and Basis of Organization. Formal and Informal Organization: Meaning, Significance. Difference between Formal and Informal Organization Theories of Organization: Brief introduction of Scientific Management Theory, Human Relations Theory Bureaucratic Theory	12
4.	Decision making: meaning, types and functions Leadership: meaning, types and functions Communication: meaning, importance and types	10

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-2021

Code: PUBA 102-A

**Course: Indian Administration**

Core Course

DSC 1B

Units	Name of Unit / Objective	No. Of Classes
1.	Evolution of Indian Administrative System: Brief account of Indian Administration during ancient period, Mughal period, British Rule and after Independence. Indian Administration: Nature, Legacy and Features of Indian Administration	15
2.	Civil Services in India: Structure of Civil Services, Nature, Role and Rationale Recruitment of Civil Services, Recruitment agencies: Union Public Service Commission: Organization Structure, Functions and Role State Public Service Commission: Organization Structure, Functions and Role	15
3.	Constitutional Authorities: Finance Commission : Organizational structure, functions and role, Election Commission: Organizational structure, functions and role, a. Comptroller and Auditor General of India: Organizational structure, functions and role.	10
4.	Problem of corruption in Indian Administration: Meaning, Causes and Control, Lok Pal and Lokayukta: Role and responsibilities Citizen's Charter: meaning, significance Right to Information Act, 2005: Objectives and main provisions	10

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-2021

### Public Administration Syllabus

#### BA-IIInd Year

Core Course-DSC-1C

Code: PUBA 201-A

#### Course: Administrative Thinkers

Units.	Name of Unit / Objective	No. Of Classes
1.	i Kautilya: Brief Life Sketch, Administrative Features of Kautilya's Arthshastra ii Saptang Theory or Elements of State and Role of King and Qualities iii Mahatma Gandhi Brief Life Sketch Concept of Ideal State iv Democracy and Administration, Theory of Trusteeship, Nonviolence and Satyagrah	15
2.	i i. F.W. Taylor: brief life sketch ii ii. Principles of Scientific Management, Mental Revolution, Incentive wage system iii iii. Elton Mayo Brief life Sketch, Human Relation Theory, Hawthorne Experiments, Importance, effects of Hawthorne Experiments.	12
3.	i Max Weber: brief life sketch, Theory of Authority Structure, Theory of Bureaucracy ii Herbert Simon: brief life sketch, Classification of Decisions, Steps in decision making iii Simon's Bounded Rationality Model	12
4.	i i. Abraham Maslow: brief sketch, The Need Hierarchy Theory of Motivation ii ii. Frederick Herzberg: brief life sketch: Two Factor or Motivation Hygiene Theory, iii iii. Job Enrichment	12

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-2021

**BA-II Year** Core Course

CODE: PUBA 202-A

Course DSC 1D

**Course: Development Administration**

Units	Name of Unit / Objective	No. Of Classes
1.	i i. Development: Definition, Nature and Dimensions of Development ii ii. Problems of Development in Developing Countries iii iii. Sustainable Development: Concept, Features and significance	12
2.	i i. Development Administration: Meaning Nature, and Scope ii ii. Essential Features of Development Administration iii iii. Difference between Traditional and Development Administration	12
3.	i i. Machinery for Planning in India NITI Aayog, Organization, Functions and Role ii ii. National Development Council, Function and Role iii iii. State Planning Board, Organization, Function and role with special reference to Himachal Pradesh a.	15
4.	Participation and Role of various Agencies in Development Administration i i. Political Parties ii ii. Local Bodies iii iii. NGO's iv iv. Self Help Groups (SHGs)	12

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-2021

### Public Administration Syllabus

#### BA-IIInd Year

Skill Enhancement Course ;SEC-1A

Code: PUBA 203-A

#### Course: Computer Applications & Office Management

Units	Name of Unit / Objective	No. Of Classes
1.	i i. Computer: Design, Architecture: Operating System ii ii. MS Office Tools (Word, Power Points, Excel etc.) iii iii. Internet & Email etc iv iv. Importance of Computers in Office Management	26
2.	Office and Office Management- meaning of office, function of office, primary and administrative functions, importance of office. Concept of paperless office, Definition and elements of office management duties of an Office Manager	25 27
3.	Meaning and importance of filing, essential of good filing system. Office Record Management- Meaning, importance of record keeping management, principles of record management and types of records kept in organization	24
4	Office Machines and equipments- Importance objectives of office machines. Office Safety & Security-Meaning importance of office Safety, safety hazards and steps to improve office safety. Security hazard and steps to improve office security, Cyber Crimes. Measurement of Office Work – Importance purpose, difficulty in measuring office work.	

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-2021

### BA-III Year

Course : DSE-1-A(Option -I) Discipline Specific Elective

CODE;PUBA303-A

### Course: Local Government in India

Units	Name of Unit / Objective	No. Of Classes
1.	i i. Evolution of Local Government in India ii ii. Local Government under British Rule and Post Independent period iii iii. Local Self government- Meaning, Nature and significance	13
2.	i i. Organization and Functions of Gram Panchyat ii ii. Panchyat Samiti-Organisation, Structure and Function iii iii. Zila Parishad- Organisation, Structure and Function iv iv. 73 <sup>rd</sup> Constitutional Amendment Act- Main Features	12
3.	i i. Municipal Corporation: Organisation, Structure and Functions ii ii. Power and Function of Mayor and Municipal Commissioner iii iii. Municipal Committee/Council/Nagar Panchyat Organization and functions. iv iv. Main Features of 74 <sup>th</sup> Constitution Amentment	15
4.	i i. Finance of Local Self Bodies ii ii. Reasons for Poor Financial Position and suggestion iii iii. Machinery for Supervision & Control over Local Bodies	14

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

## L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

### LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-2021

#### BA-III Year

Code: PUBA306-A

Course: DSE- IB; Option II Discipline Specific Elective

#### Course: Financial Administration

Units	Name of Unit / Objective	No. Of Classes
1.	Public Finance –Meaning and Forms, Financial Administration- Nature, Scope, Importance and Principles, Fiscal Federalism- Principles, Centre-state- Financial Relations, Finance Commission A.	15
2.	Government Budget- Concept, Features, Types, Principles and Functions, Government Budgeting in India- Preparation, Enactment and Execution, Delegation of Financial Powers and Control over Expenditure, Role of Ministry of Finance	15
3.	Tax Administration In India- Types of Taxes in India( Centre, State and Local) Methods of Taxation, Role of Central Board of Direct Taxes and Central Board of Excise and Customs and GST.	13
4.	Parliamentary Control over Finance, Parliamentary Committees (PAC, Estimate Committee and CPU) CAG and RBI	14

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**



# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-2021

BA-III Year

GE-1

Code : GE-1;PUBA307-A

Course: **Constitutional and Administrative Aspects of Himachal Pradesh**

Units	Name of Unit / Objective	No. Of Classes
1.	<b>I. Constitutional History:</b> i i. Emergence of Himachal Pradesh ii ii. Himachal as Chief Commissioner and Part C State. iii iii. Re-organization of H.P. and State re-organization commission iv iv. Himachal Pradesh towards full statehood.	15
2.	<b>II. Administrative History:</b> i i. Himachal Pradesh under Chief Commissioner ii ii. Administration of Himachal Pradesh during Union Territory Period. iii iii. Administrative setup of Himachal Pradesh at the time of re-organization. iv iv. Present administrative setup of Himachal Pradesh at state, division, District and Block level.	14
3.	<b>III. Local Government in Himachal Pradesh</b> i i. Salient Feature of 73 <sup>rd</sup> amendment act. ii ii. Salient Feature of 74 <sup>th</sup> amendment act. iii iii. Composition and functions of Gram Panchyat, Panchyat Smiti & Zila Parishad	15
4.	<b>IV. Transparency and Accountability of Governance in Himachal Pradesh</b> i i. The Himachal Pradesh Public Services Guarantee act 2011. ii ii. Feature of RTI act 2005 & HP RTI rules 2006	10

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-2021

### Public Administration Syllabus

#### BA-III Year

Code : GE-2;PUBA308-A option (I)

#### Course: Disaster Management

Units	Name of Unit / Objective	No. Of Classes
1.	Disaster- Meaning, Types, Causes of disaster and effects of disaster	10
2.	Classification of Disasters- Hazard, Risk and Vulnerability-Natural and Man Made Disasters-Disaster Profile of India. Organizational structure for Disaster management at National & State Level, Role of NDRF 1.	15
3.	Disaster Management: Act, Policy and Institutional Framework- Disaster Management Cycle with focus of Preparedness. Prevention and mitigation- Disaster Relief and Response-Damage Assessment-Rehabilitation, Reconstruction and Recovery a.	15
4.	Relevance of Indigenous Knowledge-Community based Disaster Management-Disaster Management Strategies-Disaster Management Case Studies	10

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: **Asst. Prof. Rajinder singh**

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-21

Year-I

INTRODUCTION TO PHYSICAL EDUCATION

THEORY COURSE

COURSE CODE: PED101TH

Unit	Name of Unit / Objective	No. Of Classes	No. Of Practical
1.	<b>Introduction</b> 1. Meaning, Definition, Need and Scope of Physical Education. 2. Aim and Objectives of Physical Education. 3. Importance of Physical Education in present era. 4. Misconceptions about Physical Education. 5. Relationship of Physical Education with General Education. 6. Physical Education as an Art and Science.	20	5
2.	1. Historical Development of Physical Education in India {Pre-Independence-(Ancient India, Medieval and British Period)}. 2. Physical Education in India (Post-Independence). 3. Contribution of Akhadas, Vyayamshalas and Y.M.C.A. 4. Modern Perspectives: National Awards/State Awards and Honours, Arjuna Award, Rajiv Gandhi Khel Ratna Award, Dronacharya Award, M.A.K.A. Trophy and Parshu Ram Award. a) 5. Eminent Sports Personalities of different games.	24	5
3.	<b>Biological Basis of Physical Education</b> 1. Growth and Development, Differences between growth and development, Factors affecting growth and development. 2. Anatomical and Physiological Differences between Male and Female. 3. Effects of Heredity and Environment on Growth and Development.	20	6
	<b>Emerging Trends in Physical Education</b> 1. Career Opportunities/Avenues in Physical		

4.	<b>Education and Sports:</b> a. As a Physical Education teacher. 11 b. Coach / trainee. c. Gym instructor. d. Physiotherapist. e. Psychologist. f. Dietitian. g. Sports administrator/manager h. Rehabilitator 2. Adventurous Sports 3. Water Sports 4. Fast growing professions and emerging trends in physical education and sports.	15	4
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**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**LESSON / TEACHING PLAN FOR THE SESSION: 2020-21**

**COURSE CODE: PED102TH**

**OLYMPIC MOVEMENT AND ORGANIZATION OF TOURNAMENTS**

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical
1.	<b>Olympics Games, Asian Games and Commonwealth Games</b> 1. Olympic Movement: Ancient and Modern Olympics Games. 2. Importance of Olympic Games, Objectives of Olympic, Olympic Motto, Emblem, Flag, Olympic Torch and Awards, Opening and Closing Ceremonies. 3. Asian Games: Historical background of Asian Games. 4. Performance of India at Olympic Games, World	20	06

	Championship, Asian Games, SAF and Commonwealth Games.		
2.	<b>Promotion of Physical Education and Sports in India</b> 1. Promotion of Physical Education and Sports: Policies, Schemes. 2. Role of IOA, SAI, NSNIS and Khelo Bharat Abhiyan in the development of Physical Education and Sports in India. 3. Causes of deterioration of Sports Performance. 4. Indian National Sports Policy and Sports Policy of Himachal Pradesh.	24	05
3.	<b>Intramurals and Extramurals</b> 1. Intramurals : i) Its importance and planning. ii) Events of competitions, time and facility factor. 2. Extramurals : ii) Planning and conduct. iii) Outcomes of participations (Educational). iv) Limitations in participations. v) Selection and training of teams. a. vi) Participation, finance and other aspects.	20	05
4.	<b>Organisation of Tournaments</b> 1. Concept and definition of tournament. 14 2. Types of Tournaments: Knock-Out and League Tournament, Process of Draw of Fixture, Merits and Demerits of various kinds of Tournaments. 3. Protocols to organise College Annual Athletic Meet.	15	06

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)  
**LESSON / TEACHING PLAN FOR THE SESSION: 2020-21**

**Year-II**

**COURSE CODE: PED201TH**

**HUMAN ANATOMY AND PHYSIOLOGY**

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical
1.	1. Basic concept of Anatomy and Physiology. 2. <b>Muscular System:</b> Types of muscles, Structure and functions of muscles, Types of muscular contraction-Isotonic, isometric and isokinetic contractions and Effects of exercises and training on muscular System. 3. <b>Skeletal System:</b> Introduction, Functions and Importance of Skeletal System, Types of Bones-Skull, Upper and Lower Limbs and Trunk and Effects of exercises and training on Skeletal System.	25	05
2.	<b>Respiratory System:</b> Introduction, Structure and Function, Types of respiration, Organs of respiration, Mechanism of Respiration, Respiratory Capacities and Volumes, Measurement of Respiratory Capacities and Volumes and Effects of exercises and training on Respiratory System. <b>2. Circulatory System:</b> Structure of the Heart, Chambers of Heart, Arteries, Veins and Capillaries, Systematic and Pulmonary Circulation, Functions of Heart, Cardiac Output, Heart Rate, Stroke Volume, Blood Volume, Blood Flow, Athlete's Heart and Effects of exercises and training on Circulatory System.	24	06
3.	<b>Digestive System:</b> Introduction, Importance of digestion, Functions and process of digestion, Organs of Digestive system, Mechanism of Digestive system, Effects of exercises and training on Digestive System. <b>2. Nervous System:</b> Structure and Function of Brain and Spinal Cord, Autonomous Nervous System, Peripheral Nervous System, Nerve Cell, Receptor, Motor Unit and Reflex Action and Effects of exercises and training on	20	06

	Nervous System.		
4.	1. Meaning and definition of Physiology and Exercise Physiology. 17 2. Need and importance of exercise physiology in the field of Physical Education. 3. Energy sources: a. Definition of energy b. Metabolism c. Creatine phosphate (CP) d. Adenocine triphosphate (ATP) e. Fatigue 4. Fatigue and factors responsible for fatigue.	25	06

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

### LESSON / TEACHING PLAN FOR THE SESSION: 2020-21

Year-II

COURSE CODE: PED203TH

SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

Sr. No.	Name of Unit / Objective	No. Of Classes
1.	<b>Sports Medicine</b> 1. Sports Medicine: Meaning, definition, aims, objectives, modern concepts and importance. 2. Injuries: Type of sports injuries, prevention of injuries in sports, common sports injuries and their diagnosis. 3. First Aid: Meaning, objectives and precautionary measures while giving first aid and PRICE. 4. Treatment of Laceration, Blisters, Contusion, Strain, Sprain, Fracture, Dislocation and Cramps.	20
2.	<b>Common Accidents and Ergogenic Aids</b> 1. Emergency treatment for common accidents: Drowning, Burning, Insect stings & bitings, Snake bite, Dog bite, Poisoning, Unconsciousness, Fainting, Hysteria, Sunstroke, Shock, Electric shock and Acid burn. 2. Doping: Meaning and Definition. a. NADA (An Introduction). b. WADA (An Introduction). c. Aims and Objectives of NADA and WADA. 3. Ergogenic aids in sports and their ill effects : a. Anabolic agents b. Stimulants c. Beta blockers d. Narcotic analgesics e. Diuretics f. Blood doping	24
	<b>Physiotherapy</b> 1. Physiotherapy: Definition, guiding principles of physiotherapy and	



3.	importance of physiotherapy. 20 a. 2. Massage: History of massage, types of massage and physiological effect of massage.	20
4.	<b>Hydrotherapy and Thermotherapy</b> 1. Hydrotherapy: Introduction and demonstration of treatments of Cryotherapy, Contrast Bath, Whirlpool Bath , Steam Bath , Sauna Bath and Hot Water Fomentation. 2. Thermotherapy: Introduction and demonstration of treatment of thermotherapy.	15

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-21

Year-II

COURSE CODE: PED202TH

SPORTS PSYCHOLOGY

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical
1.	<b>Introduction</b> 1. Meaning of psychology and sports psychology. 2. Definition, scope and importance of sports psychology. 3. Goals of sports psychology. 4. Psychological factors affecting sports performance.	25	06
2.	<b>Growth and Development</b> 1. Concept of growth and development. 2. Physical, mental, social, intellectual and emotional development in infancy, later childhood and adolescence stages. 3. Learning: meaning, definition and nature of learning. 4. Laws of learning and learning curve. 5. Theories of learning.	24	05
		20	04
3.	<b>Motivation</b> 1. Meaning and definition of motivation. 2. Types of motivation and motivation in learning. 3. Individual differences its type and nature. 4. Determinants of individual difference: a. Heredity (Nature). b. Environment (Nurture). 5. Intelligence, its meaning and types.	18	6
	<b>Personality</b> 1. Personality: Meaning of personality, definition and personality characteristics. 2. Factors affecting personality and dimensions of personality. 3. Classification of personality traits. 4. Emotion, anxiety and stress management in sports. 5. Role of sports in the development of personality.	20	05

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

# L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

## LESSON / TEACHING PLAN FOR THE SESSION: 2020-21

Year-II

COURSE CODE: PED204TH

SPORTS TRAINING

Sr. No.	Name of Unit / Objective	No. Of Classes
1.	1. Sports Training: Introduction, Meaning and Definition of Sports Training. 2. Aim and Objectives of Sports Training. 3. Principles of Sports Training, System of Sports Training. 4. Basic Performance, Good Performance and High Performance Training.	20
2.	1. Concept of warming-up and cooling down. 2. Physiological basis of warming-up and cooling down. 3. Training Components: Speed, Strength, Endurance, Flexibility and Co-ordinative Abilities. 4. Types and methods for the development of training components.	24
3.	1. Training Process: Training Load, Definition and Types of Training Load. 2. Principles of Intensity and Volume. 3. Technical Training: Meaning and Methods of Technical Training. 4. Tactical Training: Meaning and Methods of Tactical Training.	20
4.	1. Training Programming and Planning: Periodization, Meaning and types of Periodization. 2. Aim and Content of Periods-Preparatory, Competition and Transitional. 3. Planning a training session. 4. Talent Identification and Development.	18

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

### LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21

Year-III

COURSE CODE: PED301

SPECIALIZATION IN VOLLEYBALL

Sr. No.	Name of Unit / Objective	No. Of Classes	No. Of Practical & Tutorials
1.	<ol style="list-style-type: none"><li>1. History of game, measurement and preparation of the play field and equipment required for game.</li><li>2. Fundamental skills and lead-up games.</li><li>3. Techniques, strategies and method of play.</li><li>4. Rules and regulations of the game.</li><li>5. National and International tournaments associated with the game.</li><li>6. Team/Individual records (World, Olympic, Asian and National Level) of the game.</li><li>7. Awards associated with the game.</li><li>8. Duties of the officials.</li><li>9. Technical Equipment for officiating.</li><li>10. Knowledge of the score sheets.</li><li>11. Signals of officiating.</li></ol>	10	14
2.	<ol style="list-style-type: none"><li>1. General and specific warming-up and cooling down.</li><li>2. Long-term and short-term preparation for the decisive volleyball competitions.</li><li>3. Psychological qualities and preparation of a volleyball player.</li><li>4. Offensive, defense system in play, service and reception pattern.</li><li>5. Individual, group and team tactics.</li><li>6. Diet and nutrition for a volleyball player.<ol style="list-style-type: none"><li>a) 7. Coordination among the manager, coach, doctor, psychologist and players.</li></ol></li></ol>	12	15
3.	<ol style="list-style-type: none"><li>1. Teaching of volleyball skills.</li><li>2. Preparing a lesson plan.</li></ol>	08	15

	3. Specific training methods for different playing positions. 27 4. Counseling during competitions. 5. Information and publicity of the competition, writing press release and reports. 6. Facility management, quality control of equipment and player's kit, risk management, medical check-up, medical aid and insurance. 7. Personnel management and interpersonal communication skills.		
4.	1. Injuries associated with the game: Ankle sprain, finger injuries, shoulder dislocation, knee displacement. 2. Preventive and safety measures, P.R.I.C.E., Rehabilitation and physiotherapy. 3. Training means for development of different components of physical fitness i.e. Speed, Strength, Endurance, Flexibility, Coordinative ability.	10	15

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

### **LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21**

**Year-III**

**COURSE CODE: PED305TH**

**RECREATION**

<b>Sr. No.</b>	<b>Name of Unit / Objective</b>	<b>No. Of Classes</b>
1.	1. Meaning of Recreation, aims and objectives of Recreation. 2. Physical education and recreation. 3. Need and importance of recreation in modern age. 4. Arrangement of recreation centres.	20
	1. Concept and meaning of camp, aims and objectives of camp. 2. Types of camp. 3. Agencies promoting camp.	25

2.	4. Educative value of camp.	
3.	1. Types and nature of recreation. 2. Recreation providing agencies and recent changes in the recreational activities. 3. Responsibilities of a recreational manager.	18
4.	1. Meaning, importance and utilities of picnic. 2. Organization of picnic and essentials for picnic and factors affecting its organization. 3. Educative value of picnic. 4. Recreational and Adventurous Avenues in Himachal Pradesh (Water Games, Paragliding, Winter Games, Mountaineering and Trekking).	20

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21**

**Year-III**

**COURSE CODE: PED309TH**

**HEALTH EDUCATION AND NUTRITION**

<b>Sr. No.</b>	<b>Name of Unit / Objective</b>	<b>No. Of Classes</b>
1.	<b>Introduction</b> 1. Concept of health, meaning, definition and scope of health education. 2. Objective of health education. 3. Principles of health education. 4. Need and significance of health education.	25
2.	<b>Personal Health and Hygiene</b> 1. Meaning of personal hygiene. 2. Personal care of: a. Skin.	18

	<ul style="list-style-type: none"> <li>b. Hair.</li> <li>c. Ear.</li> <li>d. Eyes.</li> <li>e. Nose.</li> <li>f. Teeth.</li> <li>g. Feet.</li> <li>h. Cloths.</li> </ul> <ul style="list-style-type: none"> <li>3. Eliminating of body wastes.</li> <li>4. Rest, sleep and relaxation.</li> <li>5. Effect of alcohol and smoking on health.</li> </ul>	
3.	<p><b>School Health Programme and Nutrition</b></p> <p><b>1. Healthful School Living:</b></p> <ul style="list-style-type: none"> <li>a. Place and location of school.</li> <li>b. Buildings.</li> <li>c. Infrastructure and facilities.</li> <li>d. Safety measures.</li> </ul> <p><b>2. Health Supervision/Services:</b></p> <ul style="list-style-type: none"> <li>a. Physical medical examination and their follow up.</li> <li>b. Health inspection of students.</li> <li>c. Rehabilitation Centers of communicable diseases.</li> </ul> <p><b>3. Health Instructions Related To:</b></p> <ul style="list-style-type: none"> <li>a. Personal care.</li> <li>b. Communicable disease.</li> <li>c. Nutrition.</li> <li>d. Healthful living.</li> </ul> <p><b>4. Nutrition:</b></p> <ul style="list-style-type: none"> <li>a. Balanced diet and its elements: <ul style="list-style-type: none"> <li>i. Carbohydrates, Proteins, Fats, Vitamins, Minerals, Salts and Water.</li> <li>b. Daily energy/calorie requirements of healthy person.</li> </ul> </li> </ul>	20
4.	<p><b>Communicable Diseases</b></p> <ul style="list-style-type: none"> <li>1. Meaning and definition of communicable disease.</li> <li>2. Mode of transmission, prevention and cure and sanitation of communicable disease.</li> <li>3. Common Communicable Diseases: <ul style="list-style-type: none"> <li>a. Influenza.</li> <li>b. Malaria.</li> <li>c. Small pox.</li> <li>d. Tuberculosis.</li> <li>e. Typhoid.</li> <li>f. Cholera.</li> <li>g. Measles</li> </ul> </li> </ul>	20

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)

### LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21

Year-III

COURSE CODE: PED307TH

METHODS OF TEACHING IN PHYSICAL EDUCATION

Sr. No.	Name of Unit / Objective	No. Of Classes
1.	1. Meaning and importance of methods of teaching in Physical Education. 2. Principles of teaching methods and different methods of teaching. 3. Factors affecting teaching methods. 4. Lesson Planning: Lesson plan, objectives and types of lesson plan. 5. Principles of lesson plan and values of lesson plan. 6. Class activity/Recreational part (Assembly, Revision, Reassembly and Dismissal).	18
2.	1. Teaching aids, meaning, its importance in physical education, types of teaching aids and use and improvisation of apparatus. 2. Presentation technique, criterion of presentation technique and qualities of good presenter. 1. 3. Factors influencing presentation technique.	25
3.	1. Teaching Skills: i) Lecture method. ii) Command method. iii) Discussion method. iv) Project method. v) Demonstration method. a. vi) Imitation method.	25
	1. Class formation, its values and types of class formation. 2. Supervision and inspection of teaching methods.	25



4.	3. Methods of supervision and qualities of a supervisor. 4. Evaluation of teaching methods. • 5. Need and importance of evaluation.	
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**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21**

**Year-III**

**COURSE CODE: PED310TH**

**YOGA**

<b>Sr. No.</b>	<b>Name of Unit / Objective</b>	<b>No. Of Classes</b>
1.	1. Meaning and concept of Yoga. 2. Aim, objectives and Importance of Yoga. 3. Types of Yoga. 4. Importance of yoga in the modern world.	20
2.	1. Asanas and their importance. 2. Classification of asanas: a. Meditative b. Relaxative c. Cultural 3. General techniques and benefits of the following: Padmasana, Vajrasana, Halasana, Bhujangasana, Sarvangasana, Chakrasana, Dhanurasana, Salabhasana, Paschimotanasana, Mayurasana and Shirshasana. 4. Technique and benefits of Surya Namaskar.	18

	5. Difference between yoga and general exercises.	
3.	1. Pranayama: meaning, objectives and types of pranayama. 2. Physiological values of pranayama. 3. Surya namaskar, its methodology and importance. 4. Yoga for the cure of Disease and Postural Deformities.	18
4.	2. Sudhi Kiryas: Introduction, objectives and types of sudhi kriyas. 3. Physiological values of sudhi kriyas and Importance of sudhi kriyas. 4. Mudras and Bandhs, types and importance of mudras and bandhs.	20

**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**LESSON / TEACHING PLAN (Month Wise) FOR THE SESSION: 2020-21**

**Year-III**

**COURSE CODE: PED304PR**

**SPECIALIZATION IN ATHLETICS**

<b>Sr. No.</b>	<b>Name of Unit / Objective</b>	<b>No. Of Classes</b>	<b>No. Of Practical &amp; Tutorials</b>

1.	<p>1. Introduction to athletics.</p> <p>2. Historical developmental of athletics, Ancient Olympics and Modern Olympics games.</p> <p>3. Historical review of track and field with special reference to India.</p> <p>4. National and International level athletics championships: Olympic Games, Asian games, IAAF-World Championship, Commonwealth Games, National Games, Open National, Youth National and Inter-Universities athletics championships.</p>	20	14
2.	<p>1. Athletic track and its types.</p> <p>2. Procedure and methods to mark the track (200m, 400m).</p> <p>3. Marking and construction of Shot Put, Discus Throw, Javelin throw and Hammer throw arena.</p> <p>4. Specification and construction of Long Jump, Triple Jump high jump and pole vault pit/runways etc.</p> <p>5. Selected National and International personalities in athletics.</p> <p>6. Need, importance and procedure of Warming-up and Cooling down.</p> <p>7. First aid and rehabilitation of athletics injuries.</p>	18	15
3.	<p>1. <b>Track Events:</b> Brief background, technique, training and important motor components of the following track events:</p> <p>i) Sprints races: 100m, 200m, 400m; Hurdle Races: High Hurdle and Low Hurdle and Steeple Chase.</p> <p>ii) Middle and Long Distance Races; Combined Events: Decathlon and Hephthalon; Relay Races and Marathon.</p> <p>37</p> <p>2. <b>Fields Events:</b> Brief background, technique, training and important motor components of the following field events:</p> <p>i) Shot put, Discus throw, Javelin throw and Hammer Throw.</p> <p>ii) Long Jump, Triple Jump, High Jump and Pole vault.</p>	18	15
4.	<p>1. Technical training and practice of following events:</p> <p>i) Sprints Starting techniques, finishing techniques.</p> <p>ii) Shot put, Discus throw and Javelin throw ( Basic Teaching Stages)</p> <p>iii) Long Jump, Triple Jump High Jump and Pole vault(</p>	20	15

	Basic Teaching Stages) iv) Record files, calculations of straight, radius and staggers of standard tracks. v) Relays: Holding of the baton and various types of baton exchange (visual and non-visual).		
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**Note: Assignments, class test & midterm will be taken during the session.**

Name of Teacher: Chander Sen

Department of Botany			
LBS Govt. Degree College Saraswati Nagar			
Class	B.Sc.1 <sup>st</sup>	2020-21	
<b>Paper Nomenclature:</b>		<b>Biodiversity (Microbes, Algae, Fungi and Archegoniates )</b> <b>Paper Code: BOTA 101 (DSC-IA)</b>	
<b>Teachers' Name :</b>		<b>Dr. P.P.Chauhan</b>	
Sr. No	Week	Unit	Topic
1	Week 1	Unit-1	<b>Viruses</b> – Discovery, general structure, replication (general account),
2			DNA virus (T-phage)
3			Lytic and lysogenic cycle, RNA virus (TMV)
4			<b>Bacteria</b> – Discovery, General characteristics and cell structure
5			Reproduction – vegetative, asexual
6			Reproduction –recombination (conjugation, transformation and transduction
7	Week 2		Economic importance ( Viruses & Bacteria)
			<b>Test &amp; Problem Discussion</b>
8		Unit-2	<b>Algae:</b> General characteristics; Ecology and distribution
9			Range of thallus organization and reproduction
10			Brief account of classification of algae
11			Morphology and life-cycles of the following: <i>Nostoc</i> ,
12			Morphology and life-cycles of the following: Oedogonium
13	Week 3		Morphology and life-cycles of the following: <i>Vaucheria</i>
14			Morphology and life-cycles of the following: <i>Ectocarpus</i>
15			Morphology and life-cycles of the following: <i>Ectocarpus</i>
16			Morphology and life-cycles of the following: <i>Polysiponia</i>
17			Morphology and life-cycles of the following: <i>Polysiponia</i>
18			Economic Importance
19	Week 4		Economic Importance
			<b>Test &amp; Problem Discussion</b>
			<b>Assignment-1</b>
20		Unit-3	<b>Fungi:</b> Introduction- General characteristics, ecology and significance
21			Range of thallus organization, cell wall composition
22			Nutrition
23			Reproduction and classification
24			Morphology and life cycles of <i>Phytophthora</i> , (Zygomycota)
25	Week 5		Morphology and life cycles of <i>Rhizopus</i> (Zygomycota)
26			Morphology and life cycles of <i>Penicillium</i> (Ascomycota)
27			Morphology and life cycles of <i>Venturia</i> (Ascomycota)
28			Morphology and life cycles of <i>Puccinia</i> (Basidiomycota)
29			Morphology and life cycles of <i>Agaricus</i> (Basidiomycota)
30			Symbiotic Associations-Lichens: General account,
31	Week 6		Lichens: reproduction and significance
			<b>Test &amp; Problem Discussion</b>
32		Unit-4	<b>Bryophytes:</b> General characteristics, adaptations to land habit
33			Range of thallus organization.
34			Classification (up to family)
35			Morphology, anatomy and reproduction of <i>Marchantia</i>
36			Morphology, anatomy and reproduction of <i>Marchantia</i>
37	Week 7		Morphology, anatomy and reproduction of <i>Funaria</i> .
38			Morphology, anatomy and reproduction of <i>Funaria</i>
39			Ecology and economic importance of bryophytes

40			Ecology and economic importance of <i>Sphagnum</i>
			<b>Test &amp; Problem Discussion</b>
			<b>Assignment -2</b>
41		Unit-5	<b>Pteridophytes:</b> General characteristics, Classification (up to family)
42			Early land plants ( <i>Cooksonia</i> & <i>Rhynia</i> ).
43	Week 8		Morphology, anatomy and reproduction of <i>Selaginella</i>
44			Morphology, anatomy and reproduction of <i>Selaginella</i>
45			Morphology, anatomy and reproduction of <i>Equisetum</i>
46			Morphology, anatomy and reproduction of <i>Equisetum</i>
47			Morphology, anatomy and reproduction of <i>Adiantum</i>
			Morphology, anatomy and reproduction of <i>Adiantum</i>
48			Heterospory and seed habit
49	Week 9		Stellar evolution
50			Ecological and economical importance
			<b>Test &amp; Problem Discussion</b>
			<b>Assignment-3</b>
51		Unit-6	<b>Gymnosperms:</b> General characteristics
52			Classification (up to family),
53			Morphology, anatomy and reproduction of <i>Cycas</i>
54			Morphology, anatomy and reproduction of <i>Cycas</i>
55	Week 10		Morphology, anatomy and reproduction of <i>Cycas</i>
56			Morphology, anatomy and reproduction of <i>Pinus</i>
57			Morphology, anatomy and reproduction of <i>Pinus</i>
58			Morphology, anatomy and reproduction of <i>Pinus</i>
59			Economic importance.
60			Economic importance
			<b>Assignment- 4</b>
			<b>Test &amp; Problem Discussion</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

Department of Botany			
LBS Govt. Degree College Saraswati Nagar			
<b>Class</b>	<b>B.Sc.1<sup>st</sup> 2020-21</b>		
<b>Paper Nomenclature:</b>	<b>Plant Ecology and Taxonomy</b>	<b>Paper Code: BOTA 102 ( DSC-IB)</b>	
<b>Teachers' Name : Dr. P.P.Chauhan</b>			
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	<b>Ecology</b> : Introduction
2			Introduction continue
3		Unit-2	<b>Ecological Factors:</b> ---- Soil :Origin
4			Soil formation
5			Soil Composition
6			Soil profile
7	Week 2		Water: States of water in the environment

8			Precipitation types
9			Effect of Light
10			Effect of temperature
11			Shelford law of tolerance
12			General account of adaptations in xerophytes
13	Week 3		General account of adaptations in xerophytes
14			General account of adaptations in Hydrophytes
15			General account of adaptations in Hydrophytes
			<b>Test &amp; Problem Discussion, Assignment -1</b>
			Revision
16		Unit-3	<b>Plant communities</b> :Characters
17			Ecotone and edge effect
18			Succession
19	Week 4		Succession :Processes and type Hydrosere
20			Succession: Processes and type Xerosere
			<b>Test &amp; Problem Discussion, Assignment -2</b>
21		Unit-4	<b>Ecosystem</b> : Structure
22			Energy flow trophic organisation
23			Energy flow trophic organization
24			Food chains
25	Week 5		Food chains
26			Food webs
27			Ecological pyramids
28			Production and productivity
29			Biogeochemical cycling- Cycling of Nitrogen
30			Biogeochemical cycling- Cycling Phosphor
			<b>Test &amp; Problem Discussion , Assignment -3</b>
31	Week 6	Unit -5	<b>Introduction to plant taxonomy:</b> Identification
32			Classification
33			Classification
34		Unit-6	<b>Identification</b> :Functions of Herbarium, important herbaria world & India
35			Botanical gardens of the world and India
36			Documentation: Flora
37	Week 7		Keys: single access
38			Keys: multi-access
			<b>Test &amp; Problem Discussion Unit 5 &amp; 6 Assignment -4</b>
39		Unit-7	Taxonomic evidences from cytology
40			Taxonomic evidences from cytology
41			Taxonomic evidences from phytochemistry
42			Taxonomic evidences from phytochemistry
43	Week 8		Taxonomic evidences from molecular data.
44			Taxonomic evidences from molecular data.
45		Unit-8	<b>Taxonomic hierarchy:</b> Ranks, categories
46			Taxonomic groups
			<b>Test &amp; Problem Discussion Unit 7 &amp; 8</b>
47		Unit-9	<b>Botanical nomenclature:</b> Principles and rules (ICBN)
48			Ranks and names
49	Week 9		Binominal system
50			Typification
51			Author citation, valid publication, rejection of names

52			Principle of priority and its limitations
53		Unit -10	<b>Classification:</b> Types of classification
54			Artificial system of Classification
55	Week 10		Natural classification Bentham and Hooker (upto series)
56			Phylogenetic Engler and Prantl (upto series)
57			Angiosperm Phylogeny Group (APG) - general introduction
58		Unit-11	<b>Biometrics, numerical taxonomy and cladistics</b> Characters; variations; OTUs
59			Character weighting and coding; cluster analysis
60			Phenograms, cladograms (definitions and differences)
			<b>Test &amp; Problem Discussion Unit 9,10 &amp; 11 Assignment -5</b>
			<b>Test &amp; Problem Discussion complete syllabus</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

Department of Botany			
LBS GC Saraswati Nagar			
<b>Lesion Plan (Session 2020-21)</b>			
<b>Class</b>		<b>B.Sc.2<sup>nd</sup></b>	
<b>Paper Nomenclature:</b>		<b>Plant Anatomy and Embryology</b>	<b>Paper Code: BOTA 201 ( DSC-IA)</b>
<b>Teachers' Name :</b>		<b>Dr. P.P. Chauhan</b>	
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	<b>Meristematic and permanent tissues Introduction</b>
2			Root Apical meristems
3			shoot apical meristems
4			Simple tissue
5			Simple tissue
6			complex tissues
7	Week 2		complex tissues
			<b>Test &amp; Problem Discussion, Assignment -1</b>
8		Unit-2	<b>Plant Organs: Introduction.</b>
9			Monocot root
10			Monocot Stem
11			Dicot root
12			Dicot Stem
13	Week 3		Monocot Leaf
14			Dicot Leaf
15		Unit-3	<b>Adaptive and protective systems : General introduction</b>
16			Epidermis, adaptation & protective system
17			Cuticular adaptation & protective system
18			Stomata adaptation
			<b>Test &amp; Problem Discussion Unit (2 &amp; 3), Assignment -2</b>
19	Week 4	Unit-4	<b>Secondary Growth : Introduction , Vascular cambium</b>
20			Vascular cambium – structure and function
21			seasonal activity
22			Secondary growth in root



23			Secondary growth in root
24			Secondary growth in stem
25	Week 5		Secondary growth in stem
26			Wood (heartwood and sapwood)
27		Unit-5	<b>Anomalous Secondary Growth</b>
28			<b>Anomalous Secondary Growth continue</b>
29			<b>Anomalous Secondary Growth</b> <i>Boerhaavia</i> (Dicot)
30			<b>Anomalous Secondary Growth</b> <i>Dracaena</i> (Monocot)
			<b>Test &amp; Problem Discussion Unit (4 &amp; 5), Assignment -3</b>
31	Week 6	Unit-6	<b>Structural organization of flower</b> :Flower- a modified shoot
32			Function of floral parts
33			Structure of anther
34			Structure of pollen.
35			Microsporogenesis
36			Male gametophyte
37	Week 7		Structure and types of ovules
38			Structure and types of ovules
39			Megasporangium
40			Types of embryo sacs
41			Types of embryo sacs
42			organization and ultra structure of mature embryo sac
43	Week 8		organization and ultra structure of mature embryo sac
			<b>Test &amp; Problem Discussion Unit , Assignment -4</b>
44		Unit-7	Pollination
45			Pollination mechanisms
46			Pollination mechanisms
47			Pollination adaptations
48		Unit-8	Fertilization
49	Week 9		Double fertilization
50			Seed-structure
51			Seed-structure
52			Appendages
53			Dispersal mechanisms
54			Dispersal mechanisms
			<b>Test &amp; Problem Discussion Unit 7&amp; 8</b>
55	Week 10	Unit-9	<b>Embryo and endosperm</b> : Endosperm types
56			Structure and functions
57			Dicot and monocot embryo
58			Monocot embryo;
59			Embryo-endosperm relationship
60			Polyembryony
			<b>Test &amp; Problem Discussion Unit 9, Assignment -5</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

Department of Botany			
LBS GC Saraswati Nagar			
Lesson Plan (Session 2020-21)			
Class		B.Sc.2 <sup>nd</sup>	
Paper Nomenclature:		Plant Anatomy and Embryology	Paper Code: BOTA 201 ( DSC-IB)
Teachers' Name : Dr. P.P. Chauhan			
Sr. No	Week /date	Unit	Topic
1	Week 1	Unit-1	<b>Introduction</b> Applications of plant physiology in agriculture & horticulture
2			Importance of water, Diffusion & Osmosis
3			Importance of water potential and its components
4			Transpiration and its significance
5			Factors affecting transpiration
6			Root pressure and guttation
7	Week 2		Mechanism of Stomatal movements
8			Mechanism of Stomatal movements
			<b>Test &amp; Problem Discussion, Assignment -1</b>
9		Unit-2	<b>Mineral nutrition</b>
10			Essential elements, macro and micronutrients
11			Criteria of essentiality of elements
12			Role of essential elements
13	Week 3		Transport of ions across cell membrane
14			Active transport
15			Passive transport
16			Carriers, channels and pumps.
			<b>Test &amp; Problem Discussion</b>
17		Unit-3	<b>Translocation in phloem</b> :Composition of phloem sap
18			Girdling experiment
19	Week 4		Pressure flow model
20			Phloem loading and unloading
21		Unit-4	<b>Photosynthesis</b>
22			Photosynthetic Pigments (Chl a, b)
23			Photosynthetic Pigments (xanthophylls, carotene)
24			Photosystem I and II
25	Week 5		Photosystem I and II
26			Reaction center, antenna molecules
27			Electron transport system
28			Mechanism of ATP synthesis
29			C3 pathways of carbon fixation
30			C4 pathways of carbon fixation
31	Week 6		CAM pathways of carbon fixation
32			Photorespiration
			<b>Test &amp; Problem Discussion Unit-3 &amp;4 Assignment-2</b>
33		Unit-5	<b>Respiration</b>
34			Glycolysis
35			Anaerobic respiration
36			TCA cycle
37	Week 7		Oxidative phosphorylation

38			Oxidative phosphorylation
39			Glyoxylate cycle
40			Oxidative Pentose Phosphate Pathway
41		Unit-6	<b>Enzymes :introduction</b>
42			Structure and properties of Enzyme
43	Week 8		Mechanism of enzyme catalysis
44			Enzyme inhibition.
			<b>Test &amp; Problem Discussion Unit-5 &amp;6 Assignment-3</b>
45		Unit-7	<b>Nitrogen metabolism overview.</b>
46			Biological nitrogen fixation
47			Nitrate and ammonia assimilation
48			Nitrate and ammonia assimilation
49	Week 9	Unit-8	<b>Plant growth regulators</b>
50			Discovery and physiological roles of auxins
51			Discovery and physiological roles of gibberellins
52			Discovery and physiological roles of cytokinins
53			Discovery and physiological roles of ABA
54			Discovery and physiological roles of ethylene.
			<b>Test &amp; Problem Discussion Unit-6&amp;7 Assignment-4</b>
55	Week 10	Unit-9	<b>Plant response to light and temperature</b>
56			Photoperiodism (SDP, LDP, Day neutral plants )
57			Phytochrome (discovery and structure)
58			Red and far red light responses on photomorphogenesis
59			Vernalization
60			Practical applications of vernalization and photoperiodism
			<b>Test &amp; Problem Discussion Unit 9, Assignment -5</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

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LBS GC Saraswati Nagar			
<b>Lesson Plan (Session 2020-21)</b>			
<b>Class</b>	<b>B.Sc.2<sup>nd</sup></b>		
<b>Paper Nomenclature:</b>	<b>Biofertilizers</b>	<b>Paper Code: BOTA 203 ( SEC-I)</b>	
<b>Teachers' Name : Dr. P.P. Chauhan</b>			
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	<b>Fertilizers:</b> Introduction
2			Types of fertilizers
3			and their advantages and disadvantages
4			Brief account of microbes used as biofertilizer
5			Marketable forms of biofertilizers
6		Unit-2	<b>Rhizobium:</b> General account
7	Week 2		Isolation & Identification,
8			Mass multiplication
9			Carrier based inoculants
10			Application, Crop response

11		Unit-3	<b>Actinorrhizal Symbiosis- <i>Frankia</i></b> , Host-microsymbiont relationship
12			Isolation, Culture, Application and Advantages
			<b>Test &amp; Problem Discussion, Unit 1,2 &amp; 3. Assignment -1</b>
13	Week 3	Unit-4	<b><i>Azospirillum</i></b> : General Introduction
14			<b><i>Azospirillum</i></b> : Isolation and mass multiplication
15			Carrier based inoculants
16			Crop response to <b><i>Azospirillum</i></b>
17		Unit-5	<b><i>Azotobacter</i></b> : Characteristics
18			<b><i>Azotobacter</i></b> : Isolation and mass multiplication
19	Week 4		Application of <b><i>Azotobacter</i></b>
20			Crop response to <b><i>Azotobacter</i></b>
21		Unit-6	<b>Phosphate Solubilizing Organisms</b> : Introduction,
22			Phosphate Solubilizing Organisms: Isolation & Culture
23			Applications of Phosphate Solubilizing Organisms
			<b>Test &amp; Problem Discussion, Unit- 3,4 &amp; 5 Assignment -2</b>
24		Unit-7	<b>Cyanobacteria (Blue Green Algae)</b> : G. Introduction
25	Week 5		<b><i>Azolla</i></b>
26			<b><i>Anabaena azollae</i></b> association
27			Nitrogen fixation by Cyanobacteria
28			Factors affecting growth
29			Blue green algae & <b><i>Azolla</i></b> in rice cultivation
30		Unit-8	<b>Mycorrhizal Association</b> : Introduction
31	Week 6		Types of mycorrhizal association
32			Taxonomy, Occurrence and distribution
33			Phosphorus nutrition, Growth and yield
34			VAM – Isolation and inoculum production
35			Influence on growth and yield of crop plants
36		Unit -9	<b>Organic Farming: Introduction</b>
37	Week 7		Green manuring
38			and organic fertilizers
39			Recycling of biodegradable municipal I wastes
40			Recycling of biodegradable agricultural wastes
41			Recycling of biodegradable Industrial wastes
42			Biocompost making methods
43	Week 8		Types and method of vermicomposting
44			Types and method of vermicompostin
45			Field Application
			<b>Test &amp; Problem Discussion Unit 7, 8 &amp; 9. Assignment -3</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Annual Examination</b>

Department of Botany	
LBS GC Saraswati Nagar	
<b>Lesson Plan (Session 2020-21)</b>	
<b>Class</b>	<b>B.Sc.2<sup>nd</sup></b>

Paper Nomenclature:		Gardening and Floriculture		Paper Code: BOTA 204 (SEC-II)
Teachers' Name : Dr. P.P. Chauhan				
Sr. No	Week /date	Unit	Topic	
1	Week 1	Unit-1	Definitions of Landscape Gardening	
2			Definitions of Floriculture	
3			History of gardening	
4			Importance, status and scope of Floriculture	
5			Importance, status and scope of Landscaping; landscaping of homes	
6			Landscaping of educational institutions, highways and public parks	
7	Week 2	Unit-2	<b>Gardening operations:</b> Soil laying, Manuring and , Watering procedures.	
8			Management of pests and diseases , Soil sterilization; Seed sowing.	
9			Pricking; Planting and transplanting; Shading; Stopping or pinching	
10			Defoliation; Mulching; Pruning, Topiary making	
11		Unit-3	Principles and Elements of Garden Designs	
12			Some Famous gardens of India	
13	Week 3		Formal and Informal gardens	
14			English, Mughal and Japanese gardens	
15			Features of a garden (Garden wall, Fencing, Steps)	
16			Features of a garden ( Hedge, Edging, Lawn, Flower beds)	
17			Features of a garden ( Shrubbery, Borders, Rock garden, Water garden).	
			<b>Test &amp; Problem Discussion, Unit 1,2 &amp; 3. Assignment -1</b>	
18		Unit-4	<b>Propagation of Garden Plants: Introduction</b>	
19	Week 4		Sexual methods of propagation;	
20			Vegetative methods of propagation	
21			Role of plant growth regulators	
22			Role of plant growth regulators	
23		Unit-5	<b>Ornamental Plants: Introduction</b>	
24			Flowering annuals	
25	Week 5		Herbaceous perennials	
26			Shrubs, Climbers	
27			Ornamental trees	
28			Ornamental bulbous plants	
29			Ornamentals Palms and Cycads	
30			Potted plants	
31	Week 6		Indoor gardening	
32			Bonsai	
			<b>Test &amp; Problem Discussion, Unit 4 &amp; 5. Assignment -2</b>	
33		Unit-6	<b>Commercial Floriculture: Introduction</b>	
34			Factors affecting growth	
35			Flower production of ornamentals	
36			Cultivation of Important flower crops (Carnation	
37	Week 7		Cultivation of Important flower crops ( Chrysanthemum,)	
38			Cultivation of Important flower crops Gerbera	
39			Cultivation of Important flower crops Gladiolus,	
40			Cultivation of Important flower crops Marigold	
41			Cultivation of Important flower crops Rose & Lilium	
42		Unit -7	<b>Post Harvest Management: Introduction</b>	
43	Week 8		Post- harvest handling of important flower crops, methods to prolong vase life	
44			Packaging, storage and transport of flower crops,	
45			Flower arrangements and other floral crafts	

			<b>Test &amp; Problem Discussion, Unit- 6 &amp; 7 Assignment -3</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Annual Examination</b>

Department of Botany			
LBS GC Saraswati Nagar			
<b>Lesson Plan (Session 2020-21)</b>			
<b>Class</b>	<b>B.Sc. 3<sup>rd</sup></b>		
<b>Paper Nomenclature:</b>	<b>Economic Botany and Biotechnology Paper Code: BOTA 301 (DSE-IA)</b>		
<b>Teachers' Name :</b>	<b>Dr. P.P. Chauhan</b>		
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	Cultivated Plants: Introduction
2			Research centres, Concept of centres of origin
3			Centres of origin , their importance with reference to Vavilov's work
4		Unit-2	<b>Cereals : introduction</b>
5			Wheat Origin, morphology
6			Wheat –Uses
7	Week 2		Rice Origin, morphology
8			Rice –uses
			<b>Test &amp; Problem Discussion, Unit 1 &amp; 2 . . Assignment -1</b>
9		Unit-3	Pulses & Vegetables : Introduction
10			General account with special reference to Gram
11			General account with special reference to soybean
12			General account with special reference to Potato
13	Week 3	Unit-4	Spices: General account with special reference to clove.
14			General account with special reference to black pepper, cinnamon.
15			General account with special reference to Ginger and Turmeric (Botanical name, family, part used, morphology and uses)
16		Unit-5	<b>Beverages : Tea, morphology</b>
17			Tea , processing & uses
			Coffee, morphology
18			Coffee, processing & uses
19	Week 4		<b>Test &amp; Problem Discussion, Unit 3,4,&amp; 5. Assignment -2</b>
20		Unit-6	<b>Oils:</b> General description with special reference to groundnut
21			<b>Oils:</b> General description with special reference to groundnut
22			<b>Sugar:</b> General description with special reference to sugarcane
23			<b>Sugar:</b> General description with special reference to sugarcane
24		Unit-7	<b>Fibre Yielding Plants: General description</b>
24			Cotton (Botanical name, family part used )
25	Week 5		Cotton morphology
26			Cotton uses
27			
28		Unit-8	Medicinal Plants : Brief account of <i>Ocimum</i> ,
29			Brief account of <i>Tinospora, Aloe</i> ,
30			Brief account of, <i>Rauwolfia, Emblica</i> and <i>Cathranthus</i> )
			<b>Test &amp; Problem Discussion, Unit -6 ,7 &amp; 8.</b>

31	Week 6	Unit-9	<b>Introduction to Biotechnology</b>
32			Introduction to Biotechnology : continue
33			Tissue culture techniques
34			Tissue culture techniques
35			Tissue culture techniques
36			Micropropagation
37	Week 7		Micropropagation
38			Haploid production through androgenesis
39			Haploid production through androgenesis
40			Gynogenesis
41			Brief account of embryo culture
42			Brief account of endosperm culture
43	Week 8		Applications of plant tissue culture in agriculture
44			Applications of plant tissue culture in horticulture
45			Applications of plant tissue culture in forestry.
			<b>Test &amp; Problem Discussion, Unit- 9 Assignment -3</b>
46		Unit-10	Biotechnological Techniques
47			Introduction to r-DNA
48			Cloning vehicles,
49	Week 9		Gene transfer techniques in plants, Transgenic plants
50			Agarose electrophoresis
51			Blotting techniques
52			Northern, Southern and Western Blotting
53			DNA Fingerprinting
54			Molecular DNA markers i.e. RAPD, RFLP, SNPs
55	Week 10		DNA sequencing
56			<b>PCR</b> and Reverse Transcriptase-PCR
57			ELISA
58			Hybridoma and monoclonal antibodies
59			ELISA and Immuno-detection
60			Molecular diagnosis of human disease, Human gene Therapy
			<b>Test &amp; Problem Discussion, Unit- 10 Assignment -4</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

Department of Botany			
LBS GC Saraswati Nagar			
<b>Lesson Plan (Session 2020-21)</b>			
<b>Class</b>		<b>B.Sc. 3<sup>rd</sup></b>	
<b>Paper Nomenclature:</b>		<b>Cell and Molecular Biology      Paper Code: BOTA 303 (DSE-IB)</b>	
<b>Teachers' Name :      Dr. P.P. Chauhan</b>			
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	Techniques in Biology
2			Principles of microscopy

3			Light Microscopy
4			Phase contrast microscopy
5			Fluorescence microscopy
6			Electron microscopy (EM)- Scanning EM
7	Week 2		Scanning Transmission EM (STEM)
8			Sample ; X-ray diffraction analysis
9		Unit-2	Cell as a unit of Life: The Cell Theory; Prokaryotic
10			Eukaryotic cells; Cell size and shape; Eukaryotic Cell components.
			<b>Test &amp; Problem Discussion, Unit 1 &amp;2 Assignment -1</b>
11		Unit-3	Cell Organelles
12			Mitochondria: Structure
13	Week 3		Marker enzymes, composition
14			Semiautonomous nature; Symbiont hypothesis
15			Proteins synthesized within mitochondria; mitochondrial DNA.
16			Chloroplast Structure
17			Marker enzymes, composition
18			Semiautonomous nature, chloroplast DNA.
19	Week 4		ER : Structures and roles
20			ER : roles
21			Golgi body : Structures and roles
22			Lysosomes: Structures and roles
23			Peroxisomes : Structures, composition, functions in animals and plants and biogenesis
24			Glyoxisomes: Structures, composition, functions in animals and plants and biogenesis
25	Week 5		Nucleus
26			Nuclear Envelope- structure of nuclear pore complex
27			Chromatin; molecular organization
28			DNA packaging in eukaryotes
29			Euchromatin and heterochromatin
30			Nucleolus and ribosome structure (brief).
			<b>Test &amp; Problem Discussion, Unit 2 Assignment -2</b>
31	Week 6	Unit-4	Cell Membrane
32			Models of membrane structure, Carbohydrates in the membrane.
33			The functions of membranes
34			The fluidity of membranes; Membrane proteins and their functions.
35			Faces of the membranes ,Selective permeability of the membranes
36			Cell wall structure & functions
37	Week 7	Unit-5	Cell Cycle
38			Overview of Cell cycle
39			Mitosis
40			Meiosis
41			Meiosis
42			Molecular controls
			<b>Test &amp; Problem Discussion, Unit 4 &amp;5</b>
43	Week 8	Unit-6	Genetic material
44			DNA Miescher to Watson and Crick- historic perspective
45			Griffith's and Avery's transformation experiments, Hershey-Chase bacteriophage experiment,
46			DNA structure, types of DNA, types of genetic material.



47			A replication prokaryotes and eukaryotes bidirectional replication
48			Semi-conservative, semi discontinuous
49	Week 9		R A priming, $\theta$ theta mode of replication, replication of linear, ds- A, replicating the end of linear chromosome including replication enzymes
50		Unit-7	Transcription (Prokaryotes and Eukaryotes).
51			Types of structures of RNA (mRNA)
52			Types of structures of RNA (tRNA)
53			Types of structures of RNA (rRNA)
54			RNA polymerase- various types;
55	Week 10		Translation (Prokaryotes and eukaryotes), genetic code
			<b>Test &amp; Problem Discussion, Unit 6&amp;7 . Assignment -3</b>
56		Unit-10	Regulation of gene expression
57			Prokaryotes: Lac operon
58			Prokaryotes: Lac operon
59			Prokaryotes: Tryptophan operon
60			Regulation & Gene Expression in Eukaryotes
			Regulation & Gene Expression in Eukaryotes
			<b>Test &amp; Problem Discussion</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Practical Examination</b>
			<b>Annual Examination</b>

Department of Botany			
LBS GC Saraswati Nagar			
<b>Lesson Plan (Session 2020-21)</b>			
<b>Class</b>		<b>B.Sc. 3<sup>rd</sup></b>	
<b>Paper Nomenclature:</b>		<b>Medicinal Botany and Ethnobotany Paper Code: BOTA 306 ( SEC-I)</b>	
<b>Teachers' Name : Dr. P.P. Chauhan</b>			
<b>Sr. No</b>	<b>Week /date</b>	<b>Unit</b>	<b>Topic</b>
1	Week 1	Unit-1	<b>Traditional Systems of Medicine:</b> Brief history of use of medicinal herbs
2			Introduction to indigenous systems of medicines
3			Ayurveda, system of medicine
4			Unani system of medicine
5			Siddha system of medicine
6		Unit-2	Ethnobotany: Introduction, concept, scope and objectives
7	Week 2		Ethnobotany as an interdisciplinary science.
8			The relevance of ethnobotany in the present context
9			Major and minor ethnic groups or Tribals of India, and their life styles
10			Major and minor ethnic groups or Tribals of India, and their life styles.
			<b>Test &amp; Problem Discussion, Unit 1 &amp;2 Assignment -1</b>
11		Unit-3	<b>Plants Used by the Tribals:</b> a) Food plants
12			b) intoxicants and beverages
13	Week 3		c) Resins and oils and miscellaneous uses
14			d) Sacred plants

15		Unit-4	Methodology of Ethnobotanical Studies: General
16			a) Field work
17			Field work
18			b)Herbarium
19	Week4		c) Ancient Literature
20			d) Archaeological findings
21			e) temples and sacred places
			<b>Test &amp; Problem Discussion, Unit-3&amp; 4 Assignment -2</b>
22		Unit-5	Role of ethnobotany in modern Medicine
23			Medico-ethnobotanical sources in India
24			Significance of the plants in ethno botanical practices (along with their habitat and morphology) a) <i>Azadiractha indica</i>
25	Week 5		b) <i>Ocimum sanctum</i>
26			c) <i>Vitex negundo</i>
27			d) <i>Gloriosa superba</i>
28			e) <i>Tribulus terrestris</i>
29			f) <i>Pongamia pinnata</i>
30			g) <i>Cassia auriculata</i>
31	Week 6		h) <i>Indigofera tinctoria</i>
32			Role of ethnobotany in modern medicine with special example <i>Rauwolfia sepentina</i> , <i>Taxus wallichiana</i>
33			Role of ethnobotany in modern medicine with special example <i>Trichopus zeylanicus</i> ,.
34			Role of ethnobotany in modern medicine with special example <i>Artemisia</i> , <i>Withania</i> .
35		Unit-6	Role of ethnic groups in conservation of plant genetic resources.
36			Endangered taxa and
37	Week 7		Forest management (participatory forest management).
			<b>Test &amp; Problem Discussion, Unit-5&amp;6</b>
38		Unit-7	Ethnobotany and Legal Aspects.
39			Ethnobotany as a tool to protect interests of ethnic groups.
40			Sharing of wealth concept with few examples from India.
41			Biopiracy
42			Intellectual Property Rights
43	Week 8		Intellectual Property Rights
44			Traditional Knowledge
45			Traditional Knowledge
			<b>Test &amp; Problem Discussion, Unit-7 Assignment -3</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Annual Examination</b>

Department of Botany	
LBS GC Saraswati Nagar	
<b>Lesson Plan (Session 2020-21)</b>	
<b>Class</b>	<b>B.Sc. 3<sup>rd</sup></b>
<b>Paper Nomenclature:</b>	<b>Mushroom Cultivation Technology Paper Code: BOTA 307 ( SEC-II)</b>
<b>Teachers' Name : Dr. P.P. Chauhan</b>	

Sr. No	Week /date	Unit	Topic
1	Week 1	Unit-1	<b>Mushroom</b> –Introduction
2			History
3			Nutritional and medicinal value of edible mushrooms
4			Nutritional and medicinal value of edible mushrooms
5			Nutrition and nutraceuticals – Proteins, amino acids
6			Nutrition and nutraceuticals- mineral elements nutrition
7	Week 2		Nutrition and nutraceuticals –carbohydrates
8			Nutrition and nutraceuticals -crude fibre content
9			Nutrition and nutraceuticals –vitamins
10			Poisonous mushrooms
11		Unit-2	<b>Cultivation Technology</b> : Infrastructure
12			Substrates (locally available) Polythene bag
13	Week 3		Substrates (locally available) Polythene bag
14			Vessels
15			Inoculation hook, inoculation loop,
16			Low cost stove, sieves, culture rack,
17			Mushroom unit (Thatched house) water sprayer, tray, small polythene bag.
18			Mushroom unit (Thatched house) water sprayer, tray, small polythene bag.
19	Week 4		Pure culture: Medium,
20			Pure culture: Sterilization
21			Pure culture: Preparation of spawn, Multiplication
22			Pure culture: Multiplication
			<b>Test &amp; Problem Discussion, Unit 1 &amp; 2 Assignment -1</b>
23		Unit-3	Cultivation practices of <i>Agaricus bisporus</i>
24			Cultivation practices of <i>Pleurotus</i> sp.
25	Week 5		Cultivation practices of <i>Volvoriella volvacea</i> .
26			Composting technology in mushroom production
27			Composting technology in mushroom production
28			Low cost technology
29			Mushroom bed preparation - paddy straw
30			Mushroom bed preparation - sugarcane trash
31	Week 6		Mushroom bed preparation - maize straw
32			Mushroom bed preparation - banana leaves.
33			Factors affecting the mushroom bed preparation
34			Factors affecting the mushroom bed preparation
35		Unit-4	<b>Storage:</b> Short-term storage (Refrigeration - upto 24 hours)
36			Long term Storage :(canning, pickels, papads),
37	Week 7		Mushroom drying,
38			Storage in salt solutions
			<b>Test &amp; Problem Discussion, Unit 3 &amp; 4 Assignment -2</b>
39		Unit-5	<b>Food Preparation:</b> Types of foods prepared from mushroom
40			Research Centres -National level and Regional level
41			Cost benefit ratio - Marketing in India and abroad
42			Export Value

43	Week 8	Unit-6	Diseases of Mushrooms
44			Diseases of Mushrooms
45			Pests of Mushrooms
			<b>Test &amp; Problem Discussion, Unit 5 &amp; 6 Assignment -3</b>
			<b>Revision</b>
			<b>Revision</b>
			<b>Annual Examination</b>

## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 1<sup>st</sup> Year [CHEM 101 TH]

**Title: ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS**

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Atomic Structure:</b> Bohr Theory ---- Schrodinger wave equation.	1st week	July
2.	Significance of $\psi$ and $\psi^2$ ---- 1s & 2s atomic orbitals.	2nd week	
3.	Significance of quantum numbers ---- Electronic configurations of the atoms.	3rd week	
4.	Stability of half-filled and completely filled orbitals ---- Slater rules and applications.	4th week	
5.	<b>UNIT II - Chemical Bonding and Molecular Structure:</b> Ionic Bonding: General characteristics ---- lattice energy and solvation energy and their importance. Born-Landé equation.	1st week	August
6.	Born-Haber cycle ---- Fajan's rules ---- percentage ionic character.	2nd week	
7.	Covalent bonding- VB Approach: VSEPR Theory and hybridization.	3rd week	
8.	Concept of resonance and resonating structures in various inorganic and organic compounds.	4th week	
9.	MO Approach: ---- bonding and antibonding combination of orbitals, MO treatment of homonuclear and heteronuclear diatomic molecules such as CO, NO and NO <sup>+</sup> . Comparison of VB and MO approaches.	1st week	September
10.	<b>UNIT III - Fundamentals of Organic Chemistry:</b> Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis.	2nd week	
11.	Structure, shape and reactivity of organic molecules: Nucleophiles and electrophiles. Reactive Intermediates: Carbocations, Carbanions and free radicals.	3rd week	
12.	Strength of organic acids and bases: Comparative study with emphasis on factors affecting pK values. Aromaticity: Benzenoids and Hückel's rule.	4th week	
13.	<b>Stereochemistry:</b> Conformations ---- Interconversion of Wedge Formula, Newman, Sawhorse and Fischer projections. Concept of chirality.	1st week	October
14.	Configuration: Geometrical and Optical isomerism; Enantiomerism, Diastereomerism and Meso compounds).	2nd week	
15.	Threo and erythro; D and L; cis-trans nomenclature; R / S and E / Z Nomenclature.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	<b>Aliphatic Hydrocarbons:</b> Overview of alkanes, alkenes and alkynes. Their preparations and reactions.	1st week	November
18.	<b>Alkanes:</b> Preparation: Catalytic hydrogenation, Wurtz reaction, Kolbe's synthesis, from Grignard reagent. Reactions: Free radical Substitution: Halogenation.	2nd week	
19.	<b>Alkenes:</b> Preparation: Elimination reactions: Dehydration of alkenes and dehydrohalogenation of alkyl halides (Saytzeff's rule)	3rd week	
20.	Cis alkenes (Partial catalytic hydrogenation) and Trans alkenes (Birch reduction).	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	Cis and trans-addition, Markownikoff's and anti-Markownikoff's addition.	3rd week	
23.	Hydration, Ozonolysis, oxymecuration-demercuration, Hydroboration-oxidation.	4th week	
24.	<b>Alkynes:</b> Preparation: Acetylene from CaC <sub>2</sub> and conversion into higher alkynes; by dehalogenation of tetra halides and dehydrohalogenation of vicinal-dihalides.	3rd week	February
25.	<b>Reactions:</b> Formation of metal acetylides, addition of bromine and alkaline KMnO <sub>4</sub> , ozonolysis and oxidation with hot alkaline KMnO <sub>4</sub> .	4th week	
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	March
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	April
29.	<b>FINAL REVISION</b>	1st & 2nd week	

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

**\*Practical classes would be taken up as per the time table.**

## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 1<sup>st</sup> Year [CHEM 102 TH]

#### Title: STATES OF MATTER, CHEMICAL KINETICS & FUNCTIONAL ORGANIC CHEMISTRY

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Kinetic Theory of Gases:</b> Kinetic Theory of Gases, kinetic gas equation. Deviation of real gases from ideal behaviour----- causes of deviation. Van der Waals equation of state for real gases.	1st week	July
2.	Boyle temperature (derivation not required). Critical phenomena, critical constants and their calculation from van der Waals equation. Andrews isotherms of CO <sub>2</sub> .	2nd week	
3.	Maxwell Boltzmann distribution laws ---- importance & Temperature dependence.	3rd week	
4.	Most probable, average and root mean square velocities. Collision cross section, number, frequency, diameter and mean free path of molecules.	4th week	
5.	Viscosity of gases and effect of temperature and pressure on coefficient of viscosity.	1st week	August
6.	<b>Liquids:</b> Surface tension and its determination using stalagmometer. Viscosity of a liquid and determination of coefficient of viscosity using Ostwald viscometer. Effect of temperature on surface tension and coefficient of viscosity of a liquid	2nd week	
7.	<b>UNIT II - Solids:</b> Forms of solids. Symmetry elements, unit cells, crystal systems, Bravais lattice types and identification of lattice planes.	3rd week	
8.	Laws of Crystallography - Law of constancy of interfacial angles, Law of rational indices. Miller indices. X-Ray diffraction by crystals, Bragg's law.	4th week	September
9.	Structures of NaCl, KCl and CsCl (qualitative treatment only). Defects in crystals.	1st week	
10.	<b>Chemical Kinetics:</b> The concept of reaction rates. Effect of temperature, pressure, catalyst and other factors on reaction rates. Order and molecularity of a reaction.	2nd week	
11.	Derivation of integrated rate equations for zero, first and second order reactions.	3rd week	
12.	Half-life of a reaction, methods for determination of order of a reaction, activation energy and its calculation from Arrhenius equation.	4th week	October
13.	Theories of Reaction Rates: Collision theory and Activated Complex theory of bimolecular reactions. Comparison of the two theories.	1st week	
14.	<b>UNIT III - Aromatic hydrocarbons:</b> Preparation (Case benzene): from phenol, by decarboxylation, from acetylene, from benzene sulphonic acid.	2nd week	
15.	Electrophilic substitution ----- Side chain oxidation of alkyl benzenes	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	November
17.	<b>Alkyl Halides:</b> Types of Nucleophilic Substitution (SN <sub>1</sub> , SN <sub>2</sub> and SNi) reactions. Preparation of alkyl halides from alkenes and alcohols. Reactions.	1st week	
18.	<b>Aryl Halides:</b> Preparation, Sandmeyer & Gattermann reactions. Aromatic nucleophilic substitution, Benzyne Mechanism	2nd week	
19.	<b>UNIT IV - Alcohols:</b> Preparation of alcohols and Reactions With sodium, HX (Lucas test), esterification, oxidation. Oppeneauer oxidation.	3rd week	
20.	<b>Diols:</b> oxidation of diols. Pinacol-Pinacolone rearrangement. <b>Phenols:</b> Preparation & Reactions. Reimer - Tiemann, Gattermann-Koch, Houben-Hoesch Condensation, Schotten – Baumann Reaction.	4th week	December
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	
22.	<b>Ethers (aliphatic and aromatic):</b> Cleavage of ethers with HI.	3rd week	
23.	<b>Aldehydes and ketones:</b> Preparation & Reactions.	4th week	
24.	Aldol Condensation, Cannizzaro's reaction, Wittig reaction, Benzoin condensation.	3rd week	February
25.	Clemensen reduction Wolff Kishner reduction, Meerwein-Ponndorff Verley reduction.	4th week	
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	March
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

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**\*Class tests and assignment submission to be held at the end of each unit.**

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## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 2<sup>nd</sup> Year [CHEM 201TH]

#### Title: SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE, ELECTROCHEMISTRY & ORGANIC CHEMISTRY

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Solutions:</b> Thermodynamics of ideal solutions: Ideal solutions and Raoult's law, deviations from Raoult's law – non-ideal solutions.	1st week	July
2.	Vapour pressure-composition and temperature composition curves of ideal and non-ideal solutions. Distillation of solutions. Lever rule. Azeotropes.	2nd week	
3.	Partial miscibility of liquids: Critical solution temperature; effect of impurity on partial miscibility of liquids. Nernst distribution law and its applications, solvent extraction.	3rd week	
4.	<b>Phase Equilibrium:</b> Phases, components and degrees of freedom of a system, criteria of phase equilibrium.	4th week	
5.	Gibbs Phase Rule and its thermodynamic derivation. Derivation of Clausius – Clapeyron equation and its importance in phase equilibria.	1st week	August
6.	Phase diagrams of one-component and two component systems involving eutectics, congruent and incongruent melting points.	2nd week	
7.	<b>UNIT II - Conductance:</b> Conductivity, equivalent and molar ----- Kohlrausch law of independent migration of ions.	3rd week	
8.	Transference number and its experimental determination using Hittorf and Moving boundary methods. Ionic mobility.	4th week	
9.	Applications of conductance measurement ----- Conductometric titrations.	1st week	September
10.	<b>Electrochemistry:</b> Reversible and irreversible cells. EMF of a cell & its Measurement. Nernst equation ----- Electrochemical series.	2nd week	
11.	Thermodynamics of a reversible cell ----- Calculation of equilibrium constant.	3rd week	
12.	Concentration cells, Liquid junction potential and salt bridge. pH determination using hydrogen electrode and quinhydrone electrode.	4th week	
13.	<b>UNIT III - Carboxylic acids - Preparation &amp; Reactions, HVZ Reaction.</b>	1st week	October
14.	<b>Carboxylic acid derivatives:</b> Preparation: Acid chlorides, Anhydrides, Esters and Amides from acids and their inter conversion.	2nd week	
15.	Comparative study of nucleophilicity of acyl derivatives. Reformatsky Reaction, Perkin condensation.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	<b>Amines and Diazonium Salts:</b> Amines, Preparation, Gabriel's Phthalimide synthesis, Hofmann Bromamide reaction. Hofmann vs. Saytzeff elimination.	1st week	November
18.	Carbylamine test, Hinsberg test, Schotten – Baumann Reaction. Electrophilic substitution Diazonium salts: Preparation & Reactions.	2nd week	
19.	<b>UNIT IV - Carbohydrates:</b> Classification, and General Properties, Glucose and Fructose.	3rd week	
20.	Determination of configuration of monosaccharides,	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	Absolute configuration of Glucose and Fructose.	3rd week	
23.	Mutarotation, ascending and descending in monosaccharide.	4th week	
24.	Structure of Disaccharides (sucrose, maltose, lactose) & Polysaccharides (starch and cellulose).	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	March
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

**\*Practical classes would be taken up as per the time table.**

## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 2<sup>nd</sup> Year [CHEM 202TH]

**Title: CHEMISTRY OF MAIN GROUP ELEMENTS, CHEMICAL ENERGETICS AND EQUILIBRIA**

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Hydrogen:</b> Unique position of Hydrogen in the periodic table, isotopes.	1st week	July
2.	Ortho and para hydrogen, Industrial production.	2nd week	
3.	Hydrides and their chemistry, Heavy water, Hydrogen bonding, Hydrates.	3rd week	
4.	<b>S-Block Elements:</b> Periodicity of elements ----- electronegativity (Pauling Scale).	4th week	
5.	Solvation and complexation tendencies and solutions of metals in liquid ammonia.	1st week	August
6.	General characteristics of s-block elements like density, melting points, flame colouration and reducing character.	2nd week	
7.	<b>UNIT II - P- Block Elements:</b> Comparative studies including diagonal relationship of group 13 and 14 elements. Borohydrides, Hydrides, oxide and oxy-acids and halides of boron.	3rd week	
8.	Borax, Borazine, allotropic forms of carbon, fullerenes, carbides of calcium and silicon.	4th week	September
9.	Hydrides, oxides, oxoacids and halides of nitrogen. Allotropic forms of phosphorous.	1st week	
10.	Hydrides, halides, oxides and oxyacids of phosphorous. Basic properties of halogens and inter halogen compounds, pseudohalogens and poly halides.	2nd week	
11.	<b>Noble Gases:</b> Occurrence, History of discovery and isolation. Preparation, properties and structure of fluorides, oxides, oxyfluorides of xenon.	3rd week	
12.	Krypton difluoride and clathrate compounds of noble gases.	4th week	October
13.	<b>UNIT III - Chemical Energetics -</b> Laws of Thermodynamics. Important principles and definitions of thermochemistry.	1st week	
14.	Standard state and standard enthalpies of formations, enthalpies of solution and dilution.	2nd week	
15.	Bond energy, bond dissociation energy and resonance energy. Kirchoff's equation.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	November
17.	Statement of Third Law of thermodynamics and calculation of absolute entropies of substances.	1st week	
18.	<b>UNIT IV - Chemical Equilibrium:</b> Free energy change in a chemical reaction. Thermodynamic derivation of the law of chemical equilibrium.	2nd week	
19.	Distinction between $\Delta G$ and $\Delta G^\circ$ , Le Chatelier's principle. Relationships between $K_p$ , $K_c$ and $K_x$ for reactions involving ideal gases.	3rd week	
20.	<b>Ionic Equilibria:</b> Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water.	4th week	December
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	
22.	Ionization of weak acids and bases, pH scale, common ion effect.	3rd week	
23.	Salt hydrolysis-calculation of hydrolysis constant, degree of hydrolysis and pH for different salts. Buffer solutions.	4th week	February
24.	Solubility and solubility product of sparingly soluble salts – applications of solubility product principle.	3rd week	
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	March
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

**\*Practical classes would be taken up as per the time table.**



## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 2<sup>nd</sup> Year [CHEM 203TH]

**Title: BASIC ANALYTICAL CHEMISTRY**

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Introduction:</b> Introduction to Analytical Chemistry and its interdisciplinary nature.	1st week	July
2.	Concept of sampling. Importance of accuracy, precision and sources of error in analytical measurements.	2nd week	
3.	Presentation of experimental data and results, from the point of view of significant figures.	3rd week	
4.	<b>Analysis of soil:</b> Composition of soil, Concept of pH and pH measurement.	4th week	
5.	Complexometric titrations, Chelation, Chelating agents, use of indicators.	1st week	August
6.	Determination of pH of soil samples.	2nd week	
7.	Estimation of Calcium and Magnesium ions as Calcium carbonate by complexometric titration.	3rd week	
8.	<b>UNIT II - Analysis of water:</b> Definition of pure water, sources responsible for contaminating water, water sampling methods, water purification methods.	4th week	
9.	Determination of pH, acidity and alkalinity of a water sample.	1st week	September
10.	Determination of dissolved oxygen (DO) of a water sample.	2nd week	
11.	<b>Analysis of food products:</b> Nutritional value of foods, idea about food processing and food preservations and adulteration.	3rd week	
12.	Identification of adulterants in some common food items like coffee powder, asafoetida, chilli powder, turmeric powder, coriander powder and pulses, etc.	4th week	
13.	Analysis of preservatives and colouring matter.	1st week	October
14.	<b>UNIT III - Chromatography:</b> Definition, general introduction on principles of chromatography, paper chromatography, TLC etc.	2nd week	
15.	Paper chromatographic separation of mixture of metal ion (Fe <sup>3+</sup> and Al <sup>3+</sup> ). To compare paint samples by TLC method.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	Ion-exchange: Column, ion-exchange chromatography etc.	1st week	November
18.	Determination of ion exchange capacity of anion / cation exchange resin (using batch procedure if use of column is not feasible).	2nd week	
19.	<b>UNIT IV - Analysis of cosmetics:</b> Major and minor constituents and their function Analysis of deodorants and antiperspirants, Al, Zn, boric acid, chloride, sulphate.	3rd week	
20.	Determination of constituents of talcum powder: Magnesium oxide, Calcium oxide, Zinc oxide and Calcium carbonate by complexometric titration.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	<b>Suggested Applications:</b> To study the use of phenolphthalein in trap cases. To analyze arson accelerants. To carry out analysis of gasoline.	3rd week	
23.	<b>Suggested Instrumental demonstrations:</b> Estimation of macro nutrients: in soil samples by flame photometry. Spectrophotometric determination of Iron in Vitamin / Dietary Tablets.	4th week	
24.	Spectrophotometric Identification and Determination of Caffeine and Benzoic Acid in Soft Drink.	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	March
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 2<sup>nd</sup> Year [CHEM 204TH]

#### Title: FUEL CHEMISTRY & CHEMISTRY OF COSMETICS & PERFUMES

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I</b> - Review of energy sources (renewable and non-renewable). Classification of fuels and their calorific value.	1st week	July
2.	<b>Coal:</b> Uses of coal (fuel and nonfuel) in various industries, its composition, carbonization of coal.	2nd week	
3.	Coal gas, producer gas and water gas—composition and uses.	3rd week	
4.	Fractionation of coal tar, uses of coal tar bases chemicals, requisites of a good metallurgical coke.	4th week	
5.	Coal gasification (Hydro gasification and Catalytic gasification), Coal liquefaction and Solvent Refining.	1st week	August
6.	<b>Petroleum and Petrochemical Industry:</b> Composition of crude petroleum.	2nd week	
7.	Refining and different types of petroleum products and their applications.	3rd week	
8.	<b>UNIT II</b> - Fractional Distillation (Principle and process), Cracking (Thermal and catalytic cracking).	4th week	
9.	Reforming Petroleum and non-petroleum fuels (LPG, CNG, LNG, bio-gas, fuels derived from biomass).	1st week	September
10.	Fuel from waste, synthetic fuels (gaseous and liquids), clean fuels.	2nd week	
11.	<b>Petrochemicals:</b> Vinyl acetate, Propylene oxide, Isoprene, Butadiene, Toluene and its derivatives Xylene.	3rd week	
12.	<b>Lubricants:</b> Classification of lubricants, lubricating oils (conducting and non-conducting) Solid and semisolid lubricants, synthetic lubricants.	4th week	
13.	Properties of lubricants (viscosity index, cloud point, pore point) and their determination.	1st week	October
14.	<b>UNIT III</b> - A general study including preparation and uses of the following: Hair dye, hair spray, shampoo.	2nd week	
15.	Suntan lotions, face powder, lipsticks.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	Talcum powder, nail enamel, creams (cold, vanishing and shaving creams).	1st week	November
18.	Antiperspirants and artificial flavours.	2nd week	
19.	<b>UNIT IV</b> - Essential oils and their importance in cosmetic industries.	3rd week	
20.	Eugenol, Geraniol.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	Sandalwood oil, eucalyptus, rose oil.	3rd week	
23.	2-Phenyl ethyl alcohol, Jasmone.	4th week	
24.	Civetone, Muscone.	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	March
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

\*The schedule is subject to changes depending upon the circumstances.

\*Class tests and assignment submission to be held at the end of each unit.

## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 3<sup>rd</sup> Year [CHEM 301TH]

#### Title: POLYNUCLEAR HYDROCARBONS, DYES, HETEROCYCLIC COMPOUNDS AND SPECTROSCOPY (UV, IR, NMR)

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Polynuclear Hydrocarbons:</b> Synthesis & reactions of Naphthalene.	1st week	July
2.	Anthracene & Phenanthrene.	2nd week	
3.	Relative reactivity of these compounds at various positions.	3rd week	
4.	<b>Synthetic dyes:</b> Colour and constitution [electronic concept], classification of dyes.	4th week	
5.	Chemistry and synthesis of methyl orange, congo red, malachite green, crystal violet	1st week	August
6.	Phenolphthalein, fluorescein, alizarin and indigo.	2nd week	
7.	<b>UNIT II - Heterocyclic compounds:</b> Introduction: Classification and nomenclature. Molecular orbital picture & aromatic characteristics of pyrrole, furan, thiophene & pyridine.	3rd week	
8.	Methods of synthesis, chemical reactions with emphasis on mechanism of electrophilic substitution.	4th week	
9.	Mechanism of nucleophilic substitution reactions in pyridine. comparison of basicity of pyridine, piperidine and pyrrole.	1st week	September
10.	Introduction to condensed five & six-membered heterocyclic compounds, preparation.	2nd week	
11.	Reactions of indole quinoline & isoquinoline with special reference to Fisher indole synthesis Skraup synthesis & Bischler – Napieralski synthesis.	3rd week	
12.	Mechanism of electrophilic substitution reactions of indole, quinoline, & isoquinoline.	4th week	
13.	<b>UNIT III - Application of UV and IR Spectroscopy to Simple Organic Molecules:</b> Application of visible, ultraviolet and Infrared spectroscopy in organic molecules.	1st week	October
14.	Electromagnetic radiations, electronic transitions, $\lambda_{max}$ . & $\epsilon_{max}$ . chromophore, auxochrome, bathochromic and hypsochromic shifts.	2nd week	
15.	Application of electronic spectroscopy and Woodward rules for calculating $\lambda_{max}$ . of conjugated dienes and $\alpha$ , $\beta$ – unsaturated compounds.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	Infrared radiation and types of molecular vibrations, functional group and fingerprint region.	1st week	November
18.	IR spectra of alkanes, alkenes and simple alcohols, aldehydes, ketones, carboxylic acids and their derivatives.	2nd week	
19.	<b>UNIT IV - Nuclear Magnetic Resonance Spectroscopy:</b> Principle of nuclear magnetic resonance, number of signals, peak areas.	3rd week	
20.	Equivalent & non-equivalent protons, positions of signals, chemical shift.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	Shielding & deshielding of protons, proton counting, splitting of signals & coupling constants, magnetic equivalence of protons.	3rd week	
23.	Discussion of PMR spectra of molecules: ethyl bromide ----- acetophenone.	4th week	
24.	Simple problems on PMR spectroscopy for structure determination of organic compounds.	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	March
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

**\*Practical classes would be taken up as per the time table.**

## LESSON PLAN DEPARTMENT OF CHEMISTRY

**B.Sc. 3<sup>rd</sup> Year [CHEM 305TH]**

**Title: POLYMER CHEMISTRY**

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Introduction and history of polymeric materials:</b> Different schemes of classification of polymers, Polymer nomenclature.	1st week	July
2.	Molecular forces and chemical bonding in polymers, Texture of Polymers.	2nd week	
3.	Functionality and its importance: Criteria for synthetic polymer formation, classification of polymerization processes,	3rd week	
4.	Relationships between functionality, extent of reaction and degree of polymerization.	4th week	
5.	Bifunctional systems, Poly-functional systems.	1st week	August
6.	<b>UNIT II - Kinetics of Polymerization:</b> Mechanism and kinetics of step growth, radical chain growth.	2nd week	
7.	Ionic chain (both cationic and anionic) and coordination polymerizations,	3rd week	
8.	Mechanism and kinetics of copolymerization, polymerization techniques.	4th week	
9.	Crystallization and crystallinity: Determination of crystalline melting point and degree of crystallinity.	1st week	September
10.	Morphology of crystalline polymers, Factors affecting crystalline melting point.	2nd week	
11.	Nature and structure of polymers-Structure Property relationships.	3rd week	
12.	<b>UNIT III -</b> Determination of molecular weight of polymers (Mn, Mw, etc) by end group analysis, viscometry, light scattering and osmotic pressure methods.	4th week	
13.	Molecular weight distribution and its significance. Polydispersity index.	1st week	October
14.	Glass transition temperature (Tg) and determination of Tg, Free volume theory, WLF equation, Factors affecting glass transition temperature (Tg).	2nd week	
15.	<b>Polymer Solution</b> – Criteria for polymer solubility, Solubility parameter.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	Thermodynamics of polymer solutions, entropy, enthalpy, and free energy change of mixing of polymers solutions.	1st week	November
18.	Flory- Huggins theory, Lower and Upper critical solution temperatures.	2nd week	
19.	<b>UNIT IV -</b> Properties of Polymers (Physical, thermal, Flow & Mechanical Properties).	3rd week	
20.	Brief introduction to preparation, structure, properties and application of the following polymers: polyolefins, polystyrene and styrene copolymers.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	Poly(vinyl chloride) and related polymers, poly(vinyl acetate) and related polymers, acrylic polymers.	3rd week	
23.	Fluoro polymers, polyamides and related polymers. Phenol formaldehyde resins (Bakelite, Novalac), polyurethanes, silicone polymers, polydienes.	4th week	
24.	Polycarbonates, Conducting Polymers, [polyacetylene, polyaniline, poly(p-phenylene sulphide polypyrrole, polythiophene)].	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	March
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

**\*The schedule is subject to changes depending upon the circumstances.**

**\*Class tests and assignment submission to be held at the end of each unit.**

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## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 3<sup>rd</sup> Year [CHEM 307TH]

#### Title: CHEMICAL TECHNOLOGY & SOCIETY AND BUSINESS SKILLS FOR CHEMISTRY

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I - Chemical Technology:</b> Basic principles of distillation, solvent extraction.	1st week	July
2.	Solid-liquid leaching and liquid-liquid extraction, separation by absorption and adsorption.	2nd week	
3.	An introduction into the scope of different types of equipment needed in chemical technology.	3rd week	
4.	Reactors, distillation columns, extruders.	4th week	
5.	Pumps, mills, emulgators.	1st week	August
6.	Scaling up operations in chemical industry.	2nd week	
7.	Introduction to clean technology.	3rd week	
8.	<b>UNIT II – Society:</b> Exploration of societal and technological issues from a chemical perspective.	4th week	
9.	Chemical and scientific literacy as a means to better understand topics like air and water (and the trace materials found in them that are referred to as pollutants).	1st week	September
10.	Energy from natural sources (i.e. solar and renewable forms), from fossil fuels and from nuclear fission.	2nd week	
11.	Materials like plastics and polymers and their natural analogues, proteins and nucleic acids	3rd week	
12.	Molecular reactivity and interconversions from simple examples like combustion to complex instances like genetic engineering and the manufacture of drugs.	4th week	
13.	<b>UNIT III - Business Basics:</b> Key business concepts.	1st week	October
14.	Business plans, market need.	2nd week	
15.	Project management and routes to market.	3rd week	
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	<b>Chemistry in Industry</b> Current challenges and opportunities for the chemistry-using industries.	1st week	November
18.	Role of chemistry in India and global economies.	2nd week	
19.	<b>UNIT IV - Making money:</b> Financial aspects of business.	3rd week	
20.	Case studies.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	December
22.	<b>Intellectual property</b> Concept of intellectual property.	3rd week	
23.	Patents.	4th week	
24.	<b>REVISION &amp; CLASS TESTS</b>	3rd week	February
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	March
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

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## LESSON PLAN DEPARTMENT OF CHEMISTRY

### B.Sc. 3<sup>rd</sup> Year [CHEM 308TH]

#### Title: PESTICIDE CHEMISTRY & PHARMACEUTICAL CHEMISTRY

S.NO.	UNIT / TOPIC	WEEKLY SCHEDULE	MONTH
1.	<b>UNIT I</b> - General introduction to pesticides.	1st week	July
2.	Natural and synthetic pesticides.	2nd week	
3.	Benefits and adverse effects.	3rd week	
4.	Changing concepts of pesticides.	4th week	
5.	Structure activity relationship.	1st week	August
6.	<b>UNIT II</b> – Synthesis and technical manufacture and uses of representative pesticides.	2nd week	
7.	Organochlorines (DDT, Gammexene).	3rd week	
8.	Organophosphates (Malathion, Parathion).	4th week	September
9.	Carbamates (Carbofuran and carbaryl).	1st week	
10.	Quinones (Chloranil).	2nd week	
11.	Anilides (Alachlor and Butachlor).	3rd week	October
12.	<b>UNIT III</b> - Drugs & Pharmaceuticals Drug discovery, design and development.	4th week	
13.	Basic Retrosynthetic approach. Synthesis of the representative drugs of the following classes: analgesics agents, antipyretic agents.	1st week	
14.	Anti-inflammatory agents (Aspirin, paracetamol, Ibuprofen); antibiotics (Chloramphenicol).	2nd week	
15.	Antibacterial and antifungal agents (Sulphonamides; Sulphanethoxazol, Sulphacetamide, Trimethoprim); antiviral agents (Acyclovir).	3rd week	November
16.	<b>CLASS POWERPOINT PRESENTATIONS</b>	4th week	
17.	Central Nervous System agents (Phenobarbital, Diazepam).	1st week	
18.	Cardiovascular (Glyceryl trinitrate), antilaprosy (Dapsone).	2nd week	
19.	HIV-AIDS related drugs (AZT- Zidovudine).	3rd week	December
20.	<b>UNIT IV</b> - Fermentation Aerobic and anaerobic fermentation.	4th week	
21.	<b>MID - TERM EXAMINATION (Tentative)</b>	1st or 2nd week	
22.	Production of (i) Ethyl alcohol and citric acid.	3rd week	February
23.	(ii) Antibiotics; Penicillin, Cephalosporin, Chloromycetin and Streptomycin.	4th week	
24.	(iii) Lysine, Glutamic acid, Vitamin B2, Vitamin B12 and Vitamin C.	3rd week	
25.	<b>REVISION &amp; CLASS TESTS</b>	4th week	March
26.	<b>CLASS POWERPOINT PRESENTATIONS</b>	1st week	
27.	<b>REVISION &amp; CLASS TESTS</b>	2nd & 3rd week	
28.	<b>MID - TERM EXAMINATION (Tentative)</b>	4th week	
29.	<b>FINAL REVISION</b>	1st & 2nd week	April

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**LECTURE PLAN B.Sc. Mathematics ( 2020-21)**

MATH101TH CORE COURSE DIFFERENTIAL CALCULUS 1 <sup>st</sup> Year			
I	Limit and Continuity (epsilon and delta definition), Types of discontinuities, Differentiability offunctions, Successive differentiation, Leibnitz's theorem, Indeterminate forms.	Three weeks	
II	Rolle's theorem, Lagrange's & Cauchy Mean Value theorems, Taylor's theorem with Lagrange's and Cauchy's forms of remainder, Taylor's series. Maclaurin's series of $\sin x$ , $\cos x$ , $e^x$ , $\log(1+x)$ , $(1+x)^m$ ,	Three weeks	
III	Concavity, Convexity & Points of Inflection, Curvature, Asymptotes, Singular points, Parametric representation of curves and tracing of curves in parametric form, Polar coordinates and tracing of curves in polar coordinates.	Three weeks	
IV	Functions of several variables (upto three variables): Limit and Continuity of these functions Partial differentiation, Euler's theorem on homogeneous functions, Maxima and Minima with Lagrange Multipliers Method (two variables), Jacobian (upto three variables).	Three weeks	
MATH102TH CORE COURSE DIFFERENTIAL EQUATIONS 1 <sup>st</sup> Year			
I	Basic theory of linear differential equations, Wronskian, and its properties. First order exact differential equations. Integrating factors, rules to find an integrating factor. First order higher degree equations solvable for x, y, p. Clairut's form	Three weeks	
II	Methods for solving higher-order differential equations. Solving a differential equation by reducing its order. Linear homogenous equations with constant coefficients, Linear nonhomogenous equations.	Three weeks	
III	The method of variation of parameters with constant coefficients. The Cauchy-Euler equation and Legendre equation. Simultaneous differential equations, Total differential equations.	Three weeks	
IV	Order and degree of partial differential equations, Concept of linear and non-linear partial differential equations. Formation of first order partial differential equations(PDE). Linear partial differential equation of first order, Lagrange's method. Classification of second order partial differential equations into elliptic, parabolic and hyperbolic through illustrations only.	Three weeks	
MATH201TH REAL ANALYSIS CORE COURSE 2 <sup>nd</sup> Year			
I	Real line, bounded sets, suprema and infima, completeness property of R, Archimedean property of R, intervals. Concept of cluster points and statement of Bolzano-Weierstrass theorem	Three weeks	
II	Real Sequence, Bounded sequence, Cauchy convergence criterion for sequences. Cauchy's theorem on limits, order preservation and squeeze theorem, monotone sequences and their convergence (monotone convergence theorem without proof)	Three weeks	
III	Infinite series. Cauchy convergence criterion for series, positive term series, geometric series, comparison test, convergence of p-series, Root test, Ratio test, alternating series, Leibnitz's test (Tests of Convergence without proof). Definition and examples of absolute and conditional convergence.	Three weeks	
IV	Sequences and series of functions, Pointwise and uniform convergence. Mn-test, M-test, Results about uniform convergence, Power series and radius of convergence.	Three weeks	
MATH202TH ALGEBRA CORE COURSE 2 <sup>nd</sup> Year			
I	Definition and examples of groups, examples of abelian and non-abelian groups, the group $Z_n$ of integers under addition modulo n and the group $U(n)$ of units under multiplication modulo n. Cyclic groups from number systems, complex roots of unity.	Three weeks	
II	Subgroups, cyclic subgroups, the concept of a subgroup generated by a subset and the commutator subgroup of group, examples of subgroups including the center of a group. Cosets, Index of subgroup, Lagrange's theorem, order of an element.	Three weeks	
III	Normal subgroups: their definition, examples, and characterizations, Quotient groups. Definition of Kernel, Basic theorems of homomorphism. First theorem of Homomorphism.	Three weeks	
IV	Definition and examples of rings, examples of commutative and non-commutative rings: rings from number systems, $Z_n$ the ring of integers modulo n. Rings of matrices, Subrings and ideals, Definition of Integral domains and fields.	Three weeks	

<b>MATH307TH</b>		<b>Logic and Sets</b>	<b>SEC-1</b>	<b>3<sup>rd</sup> Year</b>
I	Introduction, propositions, truth table, negation, conjunction and disjunction. Implications, biconditional propositions, converse, contra positive and inverse propositions and precedence of logical operators.			Three weeks
II	Propositional equivalence: Logical equivalences. Predicates and quantifiers: Introduction, Quantifiers, Binding variables and Negations.			Three weeks
III	Sets, subsets, Set operations, the laws of set theory and Venn diagrams. Examples of finite and infinite sets. Finite sets and counting principle. Empty set, properties of empty set. Standard set operations. Classes of sets. Power set of a set.			Two weeks
IV	Difference and Symmetric difference of two sets. Set identities, Generalized union and intersections. Relation: Product set, Composition of relations, Types of relations, Partitions, Equivalence Relations with example of congruence modulo relation.			Two weeks
<b>MATH310TH</b>		<b>VECTOR CALCULUS</b>	<b>SEC-2</b>	<b>3<sup>rd</sup> Year</b>
I	Scalar and vector product of three vectors. Product of four vectors. Reciprocal vectors. Vector differentiation, Scalar valued point functions, vector valued point functions. Derivative along a curve, directional derivatives.			Three weeks
II	Gradient of a scalar point function. Divergence and curl of a vector point function. Gradient, Divergence and curl of sums and products. Laplacian operator.			Three weeks
III	Orthogonal curvilinear coordinates. Conditions for orthogonality. Fundamental triads of mutually orthogonal unit vectors. Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal curvilinear coordinators.			Two weeks
IV	Vector integration: line integral, surface integral, Volume integral Theorems of Gauss, Green and Stokes (without proof) and the problems based on these theorems.			Two weeks



# Department of Physics

## Lesson Plan

Class B.Sc. 1<sup>st</sup> Year

Title: Mechanics

Lecture Allotted: 3 per week

S.No.	Topics	Week	Month
1.	<b>UNIT-I: Ordinary Differential Equations:</b> 1 <sup>st</sup> order homogeneous differential equations. 2 <sup>nd</sup> order homogeneous differential equations with constant coefficients.	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Coordinate systems and motion of a particle:</b> Volume, velocity and acceleration in Cartesian co-ordinate systems.	2 <sup>nd</sup> week	
3.	Volume, velocity and acceleration in Spherical co-ordinate systems, Solid angle.	3 <sup>rd</sup> week	
4.	<b>Space Time Symmetry and Conservation Laws:</b> Relationship of conservation laws and symmetries of space and time.	4 <sup>th</sup> week	
5.	<b>Frames of Reference:</b> Inertial frames of reference, Galilean transformation and Galilean invariance.	1 <sup>st</sup> week	<b>August</b>
6.	Non-inertial frames, Coriolis force and its applications; Foucault's pendulum.	2 <sup>nd</sup> week	
7.	<b>UNIT-II: Gravitation and Inverse Square Force Law:</b> Newton's Law of Gravitation, Various forces in nature (qualitative).	3 <sup>rd</sup> week	
8.	Central and non-central forces, Inverse square force, Centre of mass.	4 <sup>th</sup> week	
9.	Equivalent one body problem. Reduced mass	1 <sup>st</sup> week	<b>September</b>
10.	, angular momentum in central force field.	2 <sup>nd</sup> week	
11.	Equation of motion under a force law. Equation of orbit and turning points.	3 <sup>rd</sup> week	
12.	relationship between eccentricity and energy, Kepler's laws. Basic idea of global positioning system (GPS).	4 <sup>th</sup> week	
13.	<b>UNIT-III: Rotational Motion and Kinematics of Elastic and Inelastic Collisions</b>	1 <sup>st</sup> week	<b>October</b>
14.	Angular velocity, angular momentum, Torque, Conservation of angular momentum	2 <sup>nd</sup> week	
15.	Elastic and inelastic collisions, coefficient of restitution,	3 <sup>rd</sup> & 4 <sup>th</sup> week	
16.	Elastic collisions in laboratory and C.M. systems	1 <sup>st</sup> week	<b>November</b>
17.	Velocities, angle and energies in elastic collisions in C.M. and lab. Systems	2 <sup>nd</sup> & 3 <sup>th</sup> week	
18.	Classical Scattering: Cross- section for elastic scattering, Rutherford scattering (with derivation).	4 <sup>th</sup> week	
19.	House Exams	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December</b>
20.	<b>Special Theory of Relativity:</b> Concept of stationary universal frame of reference and search for ether	3 <sup>rd</sup> week	
21.	Michelson- Morley experiment, postulates of special theory of relativity.	4 <sup>th</sup> week	
22.	Lorentz transformations. Observer in relativity. Relativity of simultaneity.	2 <sup>nd</sup> week	<b>February</b>
23.	<b>Effects of Relativity:</b> Length contraction. Time dilation. Relativistic addition of velocities.	3 <sup>rd</sup> week	
24.	Relativistic Doppler effect. Variation of mass with velocity and mass energy equivalence.	4 <sup>th</sup> week	
25.	Increase of mass in an inelastic collision, Relativistic momentum and energies.	1 <sup>st</sup> week	<b>March</b>
26.	Transformation of momentum, energy. Minkowsky space.	2 <sup>nd</sup> Week	
27.	Revision	3 <sup>rd</sup> week	
28.	Revision	4 <sup>th</sup> week	

\*The schedule is subject to changes depending upon the circumstances

\* Class tests to be conducted at the end of each unit

## Class B.Sc. 1<sup>st</sup> Year

### Title: Electricity Magnetism and EMT Lecture Allotted: 3 per week

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Unit-I: Vector Analysis:</b> Review of vector algebra (Scalar and Vector product), gradient, divergence, Curl and their significance,	2 <sup>nd</sup> week	
3.	Vector Integration, Line, surface and volume integrals of Vector fields,	3 <sup>rd</sup> week	
4.	Gauss-divergence theorem, Stokes's theorem, Green's theorem.	4 <sup>th</sup> week	
5.	<b>Electrostatics:</b> Significance of electrostatic force, Electrostatic Field, electric flux, Gauss's theorem of electrostatics.	1 <sup>st</sup> week	<b>August</b>
6.	Applications of Gauss theorem-Electric field due to point charge, infinite line of charge, uniformly charged spherical shell and solid sphere, plane charged sheet, charged conductor, electrostatic potential, electrostatic potential energy.	2 <sup>nd</sup> week	
7.	Electric potential due to a dipole and quadrupole, long uniformly charged wire, charged disc. Electric potential energy. Electric field as a gradient of a scalar potential.	3 <sup>rd</sup> week	
8.	Calculation of electric field due to a point charge and a dipole from potential. Method of Electrical Images. Poisson and Laplace equations.	4 <sup>th</sup> week	
9.	<b>Electric Current and Fields of Moving charges:</b> Current and current density. Continuity equation; $\nabla \cdot \mathbf{J} + \rho \partial/\partial t = 0$ .	1 <sup>st</sup> week	<b>September</b>
10.	Microscopic form of Ohm's law ( $\mathbf{J} \propto \mathbf{E}$ ) and conductivity. Failure of Ohm's law and its explanation. Invariance of charge.	2 <sup>nd</sup> week	
11.	<b>Unit-II: Magnetism:</b> Ampere circuital law and its applications. Hall Effect, Expression for Hall constant and its significance.	3 <sup>rd</sup> week	
12.	Divergence and curl of magnetic field $\mathbf{B}$ . Vector potential: Definition of vector potential $\mathbf{A}$ and derivation.	4 <sup>th</sup> week	
13.	<b>Field of Moving Charges:</b> E in different frames of reference. Field of a point charge moving with constant velocity. Field of charge that starts or stops (qualitative).	1 <sup>st</sup> week	<b>October</b>
14.	<b>Surface current density:</b> Definition. and its use in calculation of change in magnetic field at a current sheet. Transformation equations of E and B from one frame of reference to another	2 <sup>nd</sup> week	
15.	Dielectrics, parallel plate capacitor with a dielectric, dielectric constant, polarization and polarization vector, displacement vector $\mathbf{D}$ , molecular interpretation of Clausius – Mossotti equation	3 <sup>rd</sup> & 4 <sup>th</sup> week	
16.	<b>Unit-III : Electrostatic Fields in Dielectrics:</b> Polarization of matter. Atomic and molecular dipoles, induced. Dipole moment and atomic polarizability	1 <sup>st</sup> week	<b>November</b>
17.	Electric susceptibility and polarization vector Capacity of a capacitor filled with Dielectrics. Dielectrics and Gauss's law Displacement vector	2 <sup>nd</sup> & 3 <sup>rd</sup> week	
18.	Establishment of relation $\nabla \cdot \mathbf{D} = \rho_{free}$ . Energy stored in a dielectric medium.	4 <sup>th</sup> week	
19.	House Exams	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December</b>
20.	<b>Magnetic Fields in Matter:</b> Behavior of various substances in magnetic fields. Definition of M and H and their relation to free and bound currents.	3 <sup>rd</sup> week	
21.	Magnetic permeability and susceptibility and their interrelation. Orbital motion of electrons and diamagnetism. Electron spin and paramagnetic..	4 <sup>th</sup> week	
22.	Ferromagnetism. Domain theory of ferromagnetism, magnetization curve, hysteresis loss, ferrites	2 <sup>nd</sup> week	<b>February</b>
23.	<b>Maxwell's equations and Electromagnetic wave propagation:</b> Displacement current, Maxwell's equations and its physical interpretation,	3 <sup>rd</sup> week	
24.	EM waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma = 0$ . Poynting vector, Poynting theorem	4 <sup>th</sup> week	

25.	Impedence of a dielectric to EM waves, EM waves in conducting medium and skin depth. EM waves velocity in a conductor and anomalous dispersion.	1 <sup>st</sup> week	<b>March</b>
26.	Transmission of EM waves at a boundary of two dielectric media for normal and oblique incidence	2 <sup>nd</sup> Week	
27.	Revision	3 <sup>rd</sup> week	
28.	Revision	4 <sup>th</sup> week	

**\*The schedule is subject to changes depending upon the circumstances**

**\* Class tests to be conducted at the end of each unit**

**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Statistical Mechanics and Thermal Physics**  
**Lecture Allotted: 3 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Unit-I: Basic Ideas of Statistical Physics:</b> Scope of statistical physics, basic ideas about probability	2 <sup>nd</sup> week	
3.	distribution of four distinguishable particles in two compartments of equal sizes. Concept of macro-states, micro-states	3 <sup>rd</sup> week	
4.	thermodynamic probability, effect of constraints on the system	4 <sup>th</sup> week	
5.	<b>Distribution of Particles in Compartments:</b> Distribution of n particles in two compartments	1 <sup>st</sup> week	<b>August</b>
6.	Deviation from the state of maximum probability. Equilibrium state of a dynamic system	2 <sup>nd</sup> week	
7.	distribution of n distinguishable particles in k compartments of unequal sizes	3 <sup>rd</sup> week	
8.	<b>Unit-II: Types of Statistics in Physics:</b> Phase space and division into elementary cells	4 <sup>th</sup> week	
9.	Three kinds of statistics. The basic approach in the three statistics.	1 <sup>st</sup> week	<b>September</b>
10.	M-B. Statistics applied to an ideal gas in equilibrium, experimental verification of the Maxwell Boltzmann, s law of distribution of molecular speeds.	2 <sup>nd</sup> week	
11.	Need for quantum statistics, h as a natural constant and its implications	3 <sup>rd</sup> week	
12.	indistinguishability of particles and its implications.	4 <sup>th</sup> week	
13.	B-E statistics: Derivation of Planck's law of radiation	1 <sup>st</sup> week	<b>October</b>
14.	Deduction of Wien's distribution law and Stefan's law from Plank's law	2 <sup>nd</sup> week	
15.	Fermi-Dirac statistics. Applications to liquid helium, free electrons gas (Fermi level and Fermi Energy)	3 <sup>rd</sup> & 4 <sup>th</sup> week	
16.	Comparison of M-B, B-E, F-D statistics	1 <sup>st</sup> week	<b>November</b>
17.	<b>Unit-III: Entropy and Laws of Thermodynamics:</b> Application of thermodynamics to the thermoelectric effect	2 <sup>nd</sup> & 3 <sup>rd</sup> week	
18.	change of entropy along a reversible path in a p-v diagram, entropy of a perfect gas	4 <sup>th</sup> week	
19.	House Exams	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December</b>
20.	equation of state of ideal gas from simple statistical considerations, heat death of the universe	3 <sup>rd</sup> week	
21.	, change of entropy of system, additive nature of entropy, law of increase of entropy. <b>Statistical Interpretation of entropy:</b> Statistical definition of entropy	4 <sup>th</sup> week	
22.	Reversible and irreversible processes, example of reversible and irreversible processes. Work done in a reversible process, example of entropy in natural process, entropy and disorder	2 <sup>nd</sup> week	<b>February</b>
23.	<b>Unit-IV: Maxwell's Thermodynamic Relations and Their Applications:</b> Thermodynamic Potentials: Enthalpy, Gibbs, Helmholtz and Internal Energy	3 <sup>rd</sup> week	

	functions. Derivation of Maxwell's thermodynamic relations		
24.	Applications of thermodynamics relations. Cooling produced by adiabatic stretching, adiabatic compression, adiabatic Stretching of a wire, stretching of thin films	4 <sup>th</sup> week	
25.	Clausius-Clapeyron Equation, Thermo dynamical treatment of JouleThomson effect for liquification of Helium.	1 <sup>st</sup> week	<b>March</b>
26.	Production of very low temperatures by adiabatic demagnetization, TdS equations	2 <sup>nd</sup> Week	
27.	Revision	3 <sup>rd</sup> week	
28.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Waves and Optics**  
**Lecture Allotted: 3 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Unit-I: Simple harmonic motion:</b> characteristics, graphical representation of SHM, phase relation between displacement, velocity and acceleration of a particle executing SHM	2 <sup>nd</sup> week	
3.	SHM oscillator (mass attached to a spring placed on horizontal frictionless surface). energy of a simple harmonic oscillator.	3 <sup>rd</sup> week	
4.	solution of the differential equation of SHM. Average kinetic energy, average potential energy and total energy	4 <sup>th</sup> week	
5.	<b>Damped SHM:</b> Damped oscillations. differential equation of motion of one dimensional damped harmonic mechanical oscillator.	1 <sup>st</sup> week	<b>August</b>
6.	Types of damping. damped harmonic electric oscillator (differential equation and its solutions). Determination of the damping constants.	2 <sup>nd</sup> week	
7.	Logarithmic decrement. Relaxation time. The quality factor, power dissipation in a damped harmonic oscillator when damping is weak.	3 <sup>rd</sup> week	
8.	Relation between power dissipation energy and relaxation time of damped harmonic oscillator.	4 <sup>th</sup> week	
9.	<b>Unit-II: The Forced Oscillator:</b> Transient and steady behaviour of forced oscillator. Displacement and velocity variation with driving force frequency	1 <sup>st</sup> week	<b>September</b>
10.	Variation of phase with frequency. Power supplied to an oscillator and its variation with frequency.	2 <sup>nd</sup> week	
11.	Q- value and band width. Q-value as an amplification factor (Phasor treatment to be followed).	3 <sup>rd</sup> week	
12.	<b>Coupled Oscillators:</b> Stiffness coupled pendulums. Normal co-ordinates and normal modes of vibration. Inductance coupling of electrical oscillators.	4 <sup>th</sup> week	
13.	<b>Wave Motion:</b> The type of waves. The wave equation and its solution. Characteristic impedance of a string.	1 <sup>st</sup> week	<b>October</b>
14.	Impedance matching. Reflection and transmission of energy. Reflected and transmitted energy coefficients.	2 <sup>nd</sup> week	
15.	Standing waves on a string of fixed length. Energy of a vibrating string. Wave velocity and group velocity.	3 <sup>rd</sup> week	
16.	<b>Unit-III: Wave Optics:</b> Electromagnetic nature of light. Definition and Properties of wave front. Huygens Principle.	4 <sup>th</sup> week	
17.	<b>Interference:</b> Division of wavefront and division of amplitude. Young's Double Slit experiment.	1 <sup>st</sup> week	<b>November</b>
18.	Lloyd's Mirror and Fresnel's Biprism. Phase change on reflection: Stokes' treatment.	2 <sup>nd</sup> week	
19.	Interference in Thin Films: parallel and wedge-shaped films.	3 <sup>rd</sup> week	

20.	Fringes of equal inclination (Haidinger Fringes); Fringes of equal thickness (Fizeau Fringes).	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>
22.	Newton's Rings: measurement of wavelength and refractive index. Michelson's Interferometer.	3 <sup>rd</sup> week	
23.	<b>Unit-IV: Diffraction:</b> Fraunhofer diffraction: Single slit; Double Slit. Multiple slits & Diffraction grating, Dispersive power of diffraction grating	4 <sup>th</sup> week	
24.	Fresnel Diffraction: Half-period zones. Zone plate. Fresnel Diffraction pattern of a straight edge, a slit and a wire using half-period zone analysis.	2 <sup>nd</sup> week	<b>February</b>
25.	<b>Polarization:</b> Transverse nature of light waves. Unpolarized and plane polarized light, production of polarized light, Wire grid polarizer, Polaroid	3 <sup>rd</sup> week	
26.	Effect of intensity of light passing through Polaroid, Malus' law, double refraction; ordinary ray and extraordinary ray, positive and negative crystals, birefringence	4 <sup>th</sup> week	
27.	Nicol Prism, quarter wave plate and half wave plate, Polarization by reflection (Brewster law), polarization by scattering	1 <sup>st</sup> week	<b>March</b>
28.	Circular and elliptical polarization, production of elliptically polarized and circularly polarized light	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Elements of Modern Physics**  
**Lecture Allotted: 3 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Unit-I:</b> Planck's quantum, Planck's constant and light as a collection of photons; Photo-electric effect	2 <sup>nd</sup> week	
3.	Compton scattering. De Broglie wavelength and matter waves. Davisson-Germer experiment.	3 <sup>rd</sup> week	
4.	Problems with Rutherford model- instability of atoms and observation of discrete atomic spectra	4 <sup>th</sup> week	
5.	Bohr's quantization rule and atomic stability	1 <sup>st</sup> week	<b>August</b>
6.	calculation of energy levels for hydrogen like atoms and their spectra.	2 <sup>nd</sup> week	
7.	<b>Unit-II:</b> Heisenberg uncertainty principle- impossibility trajectory; estimating minimum energy of a confined principle	3 <sup>rd</sup> week	
8.	Energy-time uncertainty principle. Wave-particle duality	4 <sup>th</sup> week	<b>September</b>
9.	Matter waves and wave amplitude; Schrodinger equation for non-relativistic particles	1 <sup>st</sup> week	
10.	Momentum and Energy operators; stationary states	2 <sup>nd</sup> week	
11.	physical interpretation of wave function, probabilities and normalization	3 <sup>rd</sup> week	
12.	Probability and probability current densities in one dimension.	4 <sup>th</sup> week	<b>October</b>
13.	<b>Unit-III:</b> One dimensional infinitely rigid box	1 <sup>st</sup> week	
14.	energy eigenvalues and eigenfunctions normalization	2 <sup>nd</sup> week	
15.	Quantum mechanical scattering and tunnelling	3 <sup>rd</sup> week	
16.	tunnelling in one dimension -across a step potential.	4 <sup>th</sup> week	<b>November</b>
17.	tunnelling across a rectangular potential barrier.	1 <sup>st</sup> week	
18.	Size and structure of atomic nucleus and its relation with atomic weight	2 <sup>nd</sup> week	
19.	Impossibility of an electron being in the nucleus as a consequence of the uncertainty principle	3 <sup>rd</sup> week	

20.	Nature of nuclear force, NZ graph	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>
22.	semi-empirical mass formula and binding energy	3 <sup>rd</sup> week	
23.	<b>Unit-IV: Radioactivity:</b> stability of nucleus; Law of radioactive decay	4 <sup>th</sup> week	
24.	Mean life & half-life; $\alpha$ decay, $\beta$ -decay : energy released	2 <sup>nd</sup> week	<b>February</b>
25.	$\gamma$ -ray emission, Fission and Fusion, mass deficit,	3 <sup>rd</sup> week	
26.	relativity and generation of energy. Fission - nature of fragments and emission of neutrons	4 <sup>th</sup> week	
27.	Nuclear reactor: slow neutrons interacting with Uranium-235	1 <sup>st</sup> week	<b>March</b>
28.	Fusion and thermonuclear reactions.	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Nuclear and Particle Physics**  
**Lecture Allotted: 3 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Unit-I: General Properties of Nuclei:</b> Constituents of nucleus and their Intrinsic properties	2 <sup>nd</sup> week	
3.	quantitative facts about size, mass, charge density (matter energy), binding energy, average binding energy and its variation with mass number	3 <sup>rd</sup> week	
4.	main features of binding energy versus mass number curve, N/A plot	4 <sup>th</sup> week	
5.	angular momentum, parity, magnetic moment, electric moments, nuclear excites states.	1 <sup>st</sup> week	<b>August</b>
6.	<b>Nuclear Models:</b> Liquid drop model approach, semi empirical mass formula and significance of various terms, condition of nuclear stability	2 <sup>nd</sup> week	
7.	Two nucleon separation energies, Fermi gas model (degenerate fermion gas, nuclear symmetry potential in Fermi gas), evidence for nuclear shell structure, nuclear magic numbers	3 <sup>rd</sup> week	
8.	basic assumption of shell model, concept of mean field, residual interaction, concept of nuclear force.	4 <sup>th</sup> week	
9.	<b>Unit-II: Radioactivity decay:</b> (a) Alpha decay: basics of $\alpha$ -decay processes, theory of $\alpha$ -emission	1 <sup>st</sup> week	<b>September</b>
10.	Gamow theory of $\alpha$ -decay, Geiger Nuttall law, $\alpha$ -decay spectroscopy	2 <sup>nd</sup> week	
11.	$\beta$ -decay: energy kinematics for $\beta$ - decay, positron emission, electron capture, neutrino hypothesis.	3 <sup>rd</sup> week	
12.	Gamma decay: Gamma rays emission & kinematics, internal conversion.	4 <sup>th</sup> week	
13.	<b>Nuclear Reactions:</b> Types of Reactions, Conservation Laws, kinematics of reactions, Q-value	1 <sup>st</sup> week	<b>October</b>
14.	reaction rate, reaction cross section, Concept of compound and direct reaction, resonance reaction, Coulomb scattering (Rutherford scattering).	2 <sup>nd</sup> week	
15.	<b>Unit-III: Nuclear Detectors and Accelerators:</b> Interaction of nuclear radiation with matter: Energy loss due to ionization (Bethe-Block formula), energy loss of electrons	3 <sup>rd</sup> week	
16.	Cerenkov radiation, Detector for Nuclear Radiations: Gas detectors	4 <sup>th</sup> week	
17.	estimation of electric field, mobility of particle, for ionization chamber and GM Counter.	1 <sup>st</sup> week	<b>November</b>
18.	Basic principle of Scintillation Detectors and construction of photo-multiplier tube (PMT).	2 <sup>nd</sup> week	

19.	Semiconductor Detectors (Si & Ge) for charge particle and photon detection (concept of charge carrier and mobility).	3 <sup>rd</sup> week	
20.	facility available in India: Van-de Graaff generator (Tandem accelerator), Linear accelerator	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>
22.	Cyclotron, Synchrotrons.	3 <sup>rd</sup> week	
23.	<b>Unit-IV: Particle Physics:</b> Particle interactions; basic features. Classification of elementary particles and its families.	4 <sup>th</sup> week	
24.	Conservation Laws: energy and momentum, angular momentum, parity, Baryon number, Lepton number, Isospin, Strangeness	2 <sup>nd</sup> week	<b>February</b>
25.	Gell-Mann-Nishijima Scheme, CPT theorem, parity violation in weak interactions. Particle Symmetries	3 <sup>rd</sup> week	
26.	Quarks Model, quantum number of quarks and gluons. Quark Model of Hadrons: Quark structure of non strange and strange hadrons	4 <sup>th</sup> week	
27.	Mesons and baryons containing charm and bottom quarks, explanation of their quantum numbers in terms of their constituents quarks, Quark wave function of Mesons and nucleons, need of color quantum number	1 <sup>st</sup> week	<b>March</b>
28.	Cosmic Rays; origin of cosmic rays. primary and secondary cosmic rays, hard component and soft component, the altitude effect, the latitude effect, East–west asymmetry, cosmic rays showers.	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 2nd Year SEC-I**  
**Title: Physics Workshop Skills**  
**Lecture Allotted: 2 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	Measuring units. conversion to SI and CGS. Familiarization with meter scale	2 <sup>nd</sup> week	
3.	Vernier calliper, Screw gauge and their utility	3 <sup>rd</sup> week	
4.	Measure the dimension of a solid block, volume of cylindrical beaker/glass, diameter of a thin wire, thickness of metal sheet, etc.	4 <sup>th</sup> week	
5.	Use of Sextant to measure height of buildings, mountains, etc.	1 <sup>st</sup> week	<b>August</b>
6.	<b>Mechanical Skill:</b> Concept of workshop practice. Overview of manufacturing methods	2 <sup>nd</sup> week	
7.	casting, foundry, machining	3 <sup>rd</sup> week	
8.	forming and welding. Types of welding joints and welding defects	4 <sup>th</sup> week	
9.	Common materials used for manufacturing like steel, copper, iron, metal sheets, composites and alloy, wood	1 <sup>st</sup> week	<b>September</b>
10.	Concept of machine processing	2 <sup>nd</sup> week	
11.	introduction to common machine tools like lathe, shaper	3 <sup>rd</sup> week	
12.	drilling, milling and surface machines	4 <sup>th</sup> week	
13.	Cutting tools, lubricating oils. Cutting of a metal sheet using blade	1 <sup>st</sup> week	<b>October</b>
14.	Smoothing of cutting edge of sheet using file. Drilling of holes of different diameter in metal sheet and wooden block	2 <sup>nd</sup> week	
15.	Use of bench vice and tools for fitting	3 <sup>rd</sup> week	
16.	Make funnel using metal sheet	4 <sup>th</sup> week	
17.	<b>Electrical and Electronic Skill:</b> Use of Multimeter	1 <sup>st</sup> week	<b>November</b>
18.	Soldering of electrical circuits having discrete components (R, L, C, diode)	2 <sup>nd</sup> week	

19.	Soldering of ICs on PCB	3 <sup>rd</sup> week	<b>December</b>
20.	Operation of oscilloscope	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	
22.	Making regulated power supply	3 <sup>rd</sup> week	
23.	Timer circuit, Electronic switch using transistor and relay	4 <sup>th</sup> week	<b>February</b>
24.	<b>Introduction to prime movers:</b> Mechanism	2 <sup>nd</sup> week	
25.	gear system, wheel, Fixing of gears with motor axel.	3 <sup>rd</sup> week	
26.	Lever mechanism, Lifting of heavy weight using lever	4 <sup>th</sup> week	<b>March</b>
27.	braking systems, pulleys, working principle of power generation systems. Demonstration of pulley experiment.	1 <sup>st</sup> week	
28.	Revision	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 2nd Year SEC-II**  
**Title: Electrical Circuits and Network Skills**  
**Lecture Allotted: 2 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Basic Electricity Principles:</b> Voltage, Current, Resistance, and Power	2 <sup>nd</sup> week	
3.	Ohm's law. Series, parallel, and series-parallel combinations	3 <sup>rd</sup> week	
4.	AC Electricity and DC Electricity	4 <sup>th</sup> week	
5.	Familiarization with multimeter, voltmeter and ammeter	1 <sup>st</sup> week	<b>August</b>
6.	<b>Understanding Electrical Circuits:</b> Main electric circuit elements and their combination	2 <sup>nd</sup> week	
7.	Rules to analyze DC sourced electrical circuits	3 <sup>rd</sup> week	
8.	Current and voltage drop across the DC circuit elements	4 <sup>th</sup> week	
9.	Single-phase and three-phase alternating current sources	1 <sup>st</sup> week	<b>September</b>
10.	Rules to analyze AC sourced electrical circuits	2 <sup>nd</sup> week	
11.	Real, imaginary and complex power components of AC source	3 <sup>rd</sup> week	
12.	Power factor. Saving energy and money	4 <sup>th</sup> week	
13.	Drawing symbols. Blueprints. Reading Schematics. Ladder diagrams	1 <sup>st</sup> week	<b>October</b>
14.	Electrical Schematics. Power circuits. Control circuits. Reading of circuit schematics	2 <sup>nd</sup> week	
15.	Tracking the connections of elements and identify current flow and voltage drop	3 <sup>rd</sup> week	
16.	: DC Power sources. AC/DC generators. Inductance, capacitance, and impedance. Operation of transformers	4 <sup>th</sup> week	
17.	Single-phase, three-phase & DC motors	1 <sup>st</sup> week	<b>November</b>
18.	Basic design. Interfacing DC or AC sources to control heaters & motors. Speed & power of ac motor	2 <sup>nd</sup> week	
19.	Resistors, inductors and capacitors. Diode and rectifiers	3 <sup>rd</sup> week	
20.	Components in Series or in shunt. Response of inductors and capacitors with DC or AC sources	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>
22.	<b>Electrical Protection:</b> Relays. Fuses and disconnect switches. Circuit breakers. Overload	3 <sup>rd</sup> week	



	devices. Ground-fault protection		
23.	Grounding and isolating. Phase reversal. Surge protection. Interfacing DC or AC sources to control elements (relay protection device)	4 <sup>th</sup> week	
24.	<b>Electrical Wiring:</b> Different types of conductors and cables. Basics of wiring- Star and delta connection.	2 <sup>nd</sup> week	<b>February</b>
25.	Voltage drop and losses across cables and conductors	3 <sup>rd</sup> week	
26.	Instruments to measure current, voltage, power in DC and AC circuits. Insulation. Solid and stranded cable	4 <sup>th</sup> week	
27.	Conduit. Cable trays. Splices: wirenuts, crimps, terminal blocks, split bolts, and solder	1 <sup>st</sup> week	<b>March</b>
28.	Preparation of extension board.	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

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**Class B.Sc. 3<sup>rd</sup> Year SEC-I**  
**Title: Radiation Safety**  
**Lecture Allotted: 2 per week**

S.No.	Topics	Week	Month
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Basics of Atomic and Nuclear Physics:</b> Basic concept of atomic structure; X rays characteristic and production	2 <sup>nd</sup> week	
3.	concept of bremsstrahlung and auger electron, The composition of nucleus and its properties	3 <sup>rd</sup> week	
4.	mass number, isotopes of element, spin, binding energy, stable and unstable isotopes	4 <sup>th</sup> week	
5.	law of radioactive decay, Mean life and half life, basic concept of alpha, beta and gamma decay	1 <sup>st</sup> week	<b>August</b>
6.	concept of cross section and kinematics of nuclear reactions, types of nuclear reaction, Fusion, fission	2 <sup>nd</sup> week	
7.	<b>Interaction of Radiation with matter: Types of Radiation:</b> Alpha, Beta, Gamma and Neutron and their sources, sealed and unsealed sources	3 <sup>rd</sup> week	
8.	<b>Interaction of Photons</b> - Photoelectric effect, Compton Scattering, Pair Production	4 <sup>th</sup> week	
9.	<b>Interaction of Charged Particles:</b> Heavy charged particles - Beth-Bloch Formula	1 <sup>st</sup> week	<b>September</b>
10.	Scaling laws, Mass Stopping Power, Range, Straggling, Channeling and Cherenkov radiation	2 <sup>nd</sup> week	
11.	Beta Particles- Collision and Radiation loss (Bremsstrahlung)	3 <sup>rd</sup> week	
12.	<b>Interaction of Neutrons-</b> Collision, slowing down and Moderation.	4 <sup>th</sup> week	
13.	<b>Radiation detection and monitoring devices: Radiation Quantities and Units:</b> Basic idea of different units of activity	1 <sup>st</sup> week	<b>October</b>
14.	KERMA, exposure, absorbed dose, equivalent dose, effective dose, collective equivalent dose	2 <sup>nd</sup> week	
15.	Annual Limit of Intake (ALI) and derived Air Concentration (DAC).	3 <sup>rd</sup> week	
16.	<b>detection:</b> Basic concept and working principle of gas detectors, Ionization Chamber.	4 <sup>th</sup> week	
17.	Proportional Counter, Multi-Wire Proportional Counters (MWPC) and Gieger Muller Counter	1 <sup>st</sup> week	<b>November</b>
18.	Scintillation Detectors (Inorganic and Organic Scintillators),	2 <sup>nd</sup> week	
19.	Solid States Detectors and Neutron Detectors, Thermo luminescent Dosimetry	3 <sup>rd</sup> week	

20.	<b>Radiation safety management:</b> Biological effects of ionizing radiation, Operational limits and basics of radiation hazards evaluation and control	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>
22.	radiation protection standards, International Commission on Radiological Protection (ICRP) principles	3 <sup>rd</sup> week	
23.	justification, optimization, limitation, introduction of safety and risk management of radiation	4 <sup>th</sup> week	
24.	Nuclear waste and disposal management. Brief idea about Accelerator driven Sub-critical system (ADS) for waste management.	2 <sup>nd</sup> week	<b>February</b>
25.	<b>Application of nuclear techniques:</b> Application in medical science	3 <sup>rd</sup> week	
26.	MRI, PET, Projection Imaging Gamma Camera, radiation therapy	4 <sup>th</sup> week	
27.	Archaeology, Art, Crime detection, Mining and oil	1 <sup>st</sup> week	<b>March</b>
28.	Industrial Uses: Tracing, Gauging, Material Modification, Sterization, Food preservation	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

**\*The schedule is subject to changes depending upon the circumstances**

**\* Class tests to be conducted at the end of each unit**

### **Class B.Sc. 3<sup>rd</sup> Year SEC-II**

#### **Title: Physics Renewable Energy and Energy Harvesting**

#### **Lecture Allotted: 2 per week**

<b>S.No.</b>	<b>Topics</b>	<b>Week</b>	<b>Month</b>
1.	<b>Introduction to Course and syllabus</b>	1 <sup>st</sup> Week	<b>July</b>
2.	<b>Fossil fuels and Alternate Sources of energy:</b> Fossil fuels and Nuclear Energy, their limitation	2 <sup>nd</sup> week	
3.	need of renewable energy, non-conventional energy sources	3 <sup>rd</sup> week	
4.	An overview of developments in Offshore Wind Energy, Tidal Energy, Wave energy systems, Ocean Thermal Energy Conversion	4 <sup>th</sup> week	
5.	An overview of developments in solar energy, biomass, biochemical conversion, biogas generation, geothermal energy tidal energy, Hydroelectricity	1 <sup>st</sup> week	<b>August</b>
6.	<b>Solar energy:</b> Solar energy, its importance, storage of solar energy, solar pond, non convective solar pond, applications of solar pond and solar energy	2 <sup>nd</sup> week	
7.	solar water heater, flat plate collector, solar distillation, solar cooker	3 <sup>rd</sup> week	
8.	solar green houses, solar cell, absorption air conditioning	4 <sup>th</sup> week	
9.	Need and characteristics of photovoltaic (PV) systems, PV models and equivalent circuits, and sun tracking systems	1 <sup>st</sup> week	<b>September</b>
10.	<b>Wind Energy harvesting:</b> Fundamentals of Wind energy	2 <sup>nd</sup> week	
11.	Wind Turbines and different electrical machines in wind turbines	3 <sup>rd</sup> week	
12.	Power electronic interfaces, and grid interconnection topologies	4 <sup>th</sup> week	
13.	<b>Ocean Energy:</b> Ocean Energy Potential against Wind and Solar, Wave Characteristics and Statistics	1 <sup>st</sup> week	<b>October</b>
14.	Wave Energy Devices. Tide characteristics and Statistics	2 <sup>nd</sup> week	
15.	Tide Energy Technologies, Ocean Thermal Energy, Osmotic Power, Ocean Bio-mass	3 <sup>rd</sup> week	
16.	<b>Geothermal Energy:</b> Geothermal Resources, Geothermal Technologies	4 <sup>th</sup> week	
17.	<b>Hydro Energy:</b> Hydropower resources	1 <sup>st</sup> week	<b>November</b>
18.	hydropower technologies, environmental impact of hydro power sources	2 <sup>nd</sup> week	
19.	<b>Piezoelectric Energy harvesting:</b> Introduction	3 <sup>rd</sup> week	
20.	Physics and characteristics of piezoelectric effect, materials	4 <sup>th</sup> week	
21.	House Exams	1 <sup>st</sup> , 2 <sup>nd</sup> week	<b>December</b>

22.	mathematical description of piezoelectricity, Piezoelectric parameters	3 <sup>rd</sup> week	
23.	modeling piezoelectric generators. Piezoelectric energy harvesting applications	4 <sup>th</sup> week	
24.	<b>Electromagnetic Energy Harvesting:</b> Linear generators	2 <sup>nd</sup> week	<b>February</b>
25.	Physics mathematical models, recent applications	3 <sup>rd</sup> week	
26.	Carbon captured technologies, cell, batteries, power consumption	4 <sup>th</sup> week	
27.	Environmental issues and Renewable sources of energy, sustainability	1 <sup>st</sup> week	<b>March</b>
28.	Revision	2 <sup>nd</sup> Week	
29.	Revision	3 <sup>rd</sup> week	
30.	Revision	4 <sup>th</sup> week	

**\*The schedule is subject to changes depending upon the circumstances**

**\* Class tests to be conducted at the end of each unit**

# Department of Zoology

## Lesson Plan (Session 2020-21)

**Class B.Sc. 1<sup>st</sup> Year**  
**Title: Animal Diversity**  
**Lecture Alloted: 3 per week**

S.No.	Topics	Week	Month
1.	Introduction with students and discussion about the syllabus	5 <sup>th</sup> Aug	<b>August, 2020</b>
2.	Unit 1: Kingdom Protista	2 <sup>nd</sup> & 3 <sup>rd</sup> week	
3.	Unit 2: Phylum Porifera	4 <sup>th</sup> week	
4.	Test of Units 1 & 2, Unit 3: Phylum Cnidaria	5 <sup>th</sup> week	
5.	Unit 4: Phylum Platyhelminthes	1 <sup>st</sup> week	<b>September, 2020</b>
6.	Test of Units 3 & 4, Unit 5: Phylum Nematelminths	2 <sup>nd</sup> & 3 <sup>rd</sup> week	
7.	Unit 6: Phylum Annelida	4 <sup>th</sup> week	
8.	Test of Units 5 & 6, Unit 7: Phylum Arthropoda	5 <sup>th</sup> week	
9.	Unit 7: Phylum Arthropoda	2 <sup>nd</sup> week	<b>October, 2020</b>
10.	Unit 8: Phylum Mollusca	3 <sup>rd</sup> week	
11.	Test of Units 7 & 8, Unit 9: Phylum Echinodermata	4 <sup>th</sup> & 5 <sup>th</sup> week	
12.	Unit 10: Protochordates	1 <sup>st</sup> week	<b>November, 2020</b>
13.	Test of Units 9 & 10, Unit 11: Agnatha	2 <sup>nd</sup> & 4 <sup>th</sup> week	
14.	Unit 11: Agnatha	5 <sup>th</sup> week	
15.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
16.	Unit 12: Pisces	3 <sup>rd</sup> week	
17.	Unit 13: Amphibia & Test of Units 11 & 12	4 <sup>th</sup> week	
18.	Recapitulation	2 <sup>nd</sup> week	<b>February, 2021</b>
19.	Unit 14: Reptilia	3 <sup>rd</sup> week	
20.	Test of Unit 13 & 14	4 <sup>th</sup> week	
21.	Unit 15: Aves	1 <sup>st</sup> week	<b>March, 2021</b>
22.	Unit 15: Aves & Unit 16: Mammals	2 <sup>nd</sup> Week	
23.	Unit 16: Mammals, Test of Units 15 & 16	3 <sup>rd</sup> week	
24.	Revision	4 <sup>th</sup> week	

**\*Class Seminars, group discussion, PPTs, quiz will also be conducted.**

**\* There may be slight variation in it.**

**Class B.Sc. 1<sup>st</sup> Year**  
**Title: Comparative Anatomy & Developmental Biology of Vertebrates**  
**Lecture Alloted: 3 per week**

<b>S.No.</b>	<b>Topics</b>	<b>Week</b>	<b>Month</b>
1.	Introduction with students and discussion about the syllabus	5 <sup>th</sup> Aug	<b>August,2020</b>
2.	Unit 1: Integumentary System	2 <sup>nd</sup> & 3 <sup>rd</sup> week	
3.	Unit 2: Skeletal System Test of Units 1 & 2	4 <sup>th</sup> 5 <sup>th</sup> week	
4.	Unit 3: Digestive System	1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> week	<b>September,2020</b>
5.	Unit 4: Respiratory System Test of Unit 3	4 <sup>th</sup> 5 <sup>th</sup> week	
6.	Unit 5: Circulatory System Test of Unit 4	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>October,2020</b>
7.	Unit 6: Urinogenital System Test of Unit 5	4 <sup>th</sup> & 5 <sup>th</sup> week	
8.	Unit 7: Nervous System Test of Unit 6	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> week	<b>November,2020</b>
9.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December,2020</b>
10.	Unit 8: Sense organs Test of Unit 7 & 8	3 <sup>rd</sup> & 4 <sup>th</sup> week	
11.	Recapitulation Unit 9: Early Embryonic Development	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February,2021</b>
12.	Unit 10: Late Embryonic Development Test of Unit 9	1 <sup>st</sup> 2 <sup>nd</sup> week	<b>March,2021</b>
13.	Unit 11: Control of Development Test of Unit 10 & 11	3 <sup>rd</sup> week	
14.	Revision	4 <sup>th</sup> week	

**\*Class Seminars, group discussion, PPTs, quiz will also be conducted.**

**\* There may be slight variation in it.**

**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Physiology & Biochemistry**  
**Lecture Alloted: 3 per week**

S.No.	Topics	Week	Month
1.	Introduction with students and discussion about the syllabus	5 <sup>th</sup> Aug	<b>August, 2020</b>
2.	Unit 1: Nerve & Muscle Test of Unit 1	2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> week	
3.	Unit 2: Digestion	5 <sup>th</sup> week	
4.	Unit 2: Digestion	1 <sup>st</sup> week	<b>September, 2020</b>
5.	Unit 3: Respiration Test of Unit 2	2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> week	
6.	Unit 4: Excretion Test of Unit 3	5 <sup>th</sup> week	
7.	Unit 4: Excretion	1 <sup>st</sup> week	<b>October, 2020</b>
8.	Unit 5: Cardiovascular System Test of Unit 4	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> & 5 <sup>th</sup> week	
9.	Unit 6: Reproduction & Endocrine Glands Test of Unit 5	1 <sup>st</sup> 2 <sup>nd</sup> & 4 <sup>th</sup> 5 <sup>th</sup> week	<b>November, 2020</b>
10.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
11.	Unit 7: Carbohydrate Metabolism Test of Unit 6	3 <sup>rd</sup> & 4 <sup>th</sup> week	
12.	Recapitulation Unit 8: Lipid Metabolism, Test of Unit 7	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February, 2021</b>
13.	Unit 9: Protein Metabolism Test of Unit 8	1 <sup>st</sup> 2 <sup>nd</sup> week	<b>March, 2021</b>
14.	Unit 10: Enzymes Test of Unit 9	3 <sup>rd</sup> week	
15.	Revision	4 <sup>th</sup> week	

**\*Class Seminars, group discussion, PPTs, quiz will also be conducted.**

**\* There may be slight variation in it.**

**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Genetics & Evolutionary Biology**  
**Lecture Alloted: 3 per week**

S.No.	Topics	Week	Month
1.	Introduction with students and discussion about the syllabus	5 <sup>th</sup> Aug	<b>August, 2020</b>
2.	Unit 1: Introduction to Genetics	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	
3.	Unit 2: Mendelian Genetics & its Existence	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>September, 2020</b>
4.	Unit 3: Linkage, Crossing Over & Chromosomal Mapping Test of Units 1 & 2	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>October, 2020</b>
5.	Unit 4: Mutations	4 <sup>th</sup> 5 <sup>th</sup> week	
6.	Unit 4: Mutations Test of Unit 3	1 <sup>st</sup> 2 <sup>nd</sup> week	<b>November, 2020</b>
7.	Unit 5: Sex Determination Test of Unit 4	3 <sup>rd</sup> & 4 <sup>th</sup> week	
8.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
9.	Unit 6: History of Life	3 <sup>rd</sup> week	
10.	Unit 7: Introduction to Evolutionary Theories	4 <sup>th</sup> week	
11.	Unit 8: Direct Evidences of Evolution Test of Units 6 & 7	2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>February, 2021</b>
12.	Unit 9: Processes of Evolutionary Change	4 <sup>th</sup> week	
13.	Unit 9: Processes of Evolutionary Change Test of Unit 8	1 <sup>st</sup> week	<b>March, 2021</b>
14.	Unit 10: Species Concept Test of Unit 9	2 <sup>nd</sup> week	
15.	Unit 11: Macroevolution Test of Unit 10	3 <sup>rd</sup> week	
16.	Unit 12: Extinction Test of Units 11 & 12 Revision	4 <sup>th</sup> week	

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.

**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Medical Diagnostics (SEC)**  
**Lecture Alloted: 2 per week**

S.No.	Topics	Week	Month
1.	Unit 1: Introduction to Medical Diagnostics & its Importance	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>August, 2020</b>
2.	Unit 2: Diagnostics Method Used for Analysis of Blood	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>September, 2020</b>
3.	Test of Units 1 & 2	5 <sup>th</sup> week	
4.	Unit 3: Diagnostic Methods Used for Urine Analysis	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>October, 2020</b>
5.	Test of Unit 3	5 <sup>th</sup> week	
6.	Unit 4: Non-Infectious Diseases	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>November, 2020</b>
7.	Test of Unit 4	4 <sup>th</sup> week	
8.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
9.	Unit 5: Infectious Diseases	3 <sup>rd</sup> 4 <sup>th</sup> week	
10.	Test of Unit 5	4 <sup>th</sup> week	
11.	Unit 6: Tumours	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February, 2021</b>
12.	Test of Unit 6	1 <sup>st</sup> week	<b>March, 2021</b>
13.	Revision	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.



**Class B.Sc. 2<sup>nd</sup> Year**  
**Title: Apiculture (SEC)**  
**Lecture Alloted: 2 per week**

<b>S.No.</b>	<b>Topics</b>	<b>Week</b>	<b>Month</b>
1.	Introductory Session	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>August, 2020</b>
2.	Unit 1: Biology of Bees	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>September, 2020</b>
3.	Test of unit 1	5 <sup>th</sup> week	
4.	Unit 2: Rearing of Bees	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>October, 2020</b>
5.	Test of Unit 2	5 <sup>th</sup> week	
6.	Unit 3: Diseases & Enemies	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>November, 2020</b>
7.	Test of Unit 3	4 <sup>th</sup> week	
8.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
9.	Unit 4: Bee Economy	3 <sup>rd</sup> 4 <sup>th</sup> week	
10.	Test of Unit 4	4 <sup>th</sup> week	
11.	Unit 5: Entrepreneurship in Apiculture	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February, 2021</b>
12.	Test of Unit 5	1 <sup>st</sup> week	<b>March, 2021</b>
13.	Revision	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup>	

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.

**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Applied Zoology**  
**Lecture Alloted: 3 per week**

S.No.	Topics	Week	Month
1.	Unit 1: Introduction to Host-Parasite Relationship	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>August, 2020</b>
2.	Unit 2: Epidemiology of Disease	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>September, 2020</b>
3.	Test of Units 1 & 2	5 <sup>th</sup> week	
4.	Unit 3: Rickettsiae & Spirochaetes	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>October, 2020</b>
5.	Unit 4: Parasitic Protozoa Test of Unit 3	4 <sup>th</sup> 5 <sup>th</sup> week	
6.	Unit 5: Parasitic Helminthes Test of Unit 4	1 <sup>st</sup> 2 <sup>nd</sup> week	<b>November, 2020</b>
7.	Unit 6: Insects of Economic Importance Test of Unit 5	3 <sup>rd</sup> 4 <sup>th</sup> week	
8.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
9.	Unit 7: Insects of Medical Importance Test of Unit 6	3 <sup>rd</sup> week	
10.	Unit 8: Animal Husbandry	4 <sup>th</sup> week	
11.	Unit 9: Poultry Farming Test of Units 7 & 8	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February, 2021</b>
12.	Unit 10: Fish Technology Test of Units 9 & 10	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> week	<b>March, 2021</b>
13.	Revision	4 <sup>th</sup> week	

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.

**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Immunology**  
**Lecture Alloted: 3 per week**

<b>S.No.</b>	<b>Topics</b>	<b>Week</b>	<b>Month</b>
1.	Unit 1: Overview of the Immune System Test of Unit 1	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>August, 2020</b>
2.	Unit 2: Cells & Organs of the Immune System Test of Unit 2	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>September, 2020</b>
3.	Unit 3: Antigens	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	<b>October, 2020</b>
4.	Unit 4: Antibodies Test of Unit 3	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>November, 2020</b>
5.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	<b>December, 2020</b>
6.	Unit 5: Working of the Immune System Test of Unit 4	3 <sup>rd</sup> 4 <sup>th</sup> week	
7.	Unit 6: Immune System in Health & Disease Test of Unit 5	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	<b>February, 2021</b>
8.	Unit 7: Vaccines Test of Unit 6	1 <sup>st</sup> 2 <sup>nd</sup> week	<b>March, 2021</b>
9.	Test of Unit 7 Revision	3 <sup>rd</sup> 4 <sup>th</sup> week	

**\*Class Seminars, group discussion, PPTs, quiz will also be conducted.**

**\* There may be slight variation in it.**

**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Sericulture (SEC)**  
**Lecture Alloted: 2 per week**

S.No.	Topics	Week	Month
1.	Unit 1: Introduction	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	August, 2020
2.	Unit 2: Biology of Silkworm Test of Unit 1	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	September, 2020
3.	Unit 3: Rearing of Silkworms Test of Unit 2	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	October, 2020
4.	Unit 4: Pests & Diseases Test of Unit 3	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	November, 2020
5.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	December, 2020
6.	Unit 5: Entrepreneurship in Sericulture Test of Unit 4 & 5	3 <sup>rd</sup> 4 <sup>th</sup> week	
7.	Tests & Revision	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	February, 2021

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.

**Class B.Sc. 3<sup>rd</sup> Year**  
**Title: Aquarium Fish Keeping (SEC)**  
**Lecture Alloted: 2 per week**

S.No.	Topics	Week	Month
1.	Unit 1: Introduction to Aquarium Fish Keeping	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	August, 2020
2.	Test of Unit 1	1 <sup>st</sup> week	September, 2020
3.	Unit 2: Biology of Aquarium Fishes	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> week	
4.	Test of Unit 2	1 <sup>st</sup>	October, 2020
5.	Unit 3: Food & Feeding of Aquarium Fishes	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	
6.	Test of Unit 3	1 <sup>st</sup>	November, 2020
7.	Unit 4: Fish Transportation	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup>	
8.	Midterm (Tentative)	1 <sup>st</sup> or 2 <sup>nd</sup> week	December, 2020
9.	Unit 5: Maintenance of Aquarium	3 <sup>rd</sup> 4 <sup>th</sup> week	
10.	Test of Unit 5	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	February, 2021
11.	Revision	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> week	March, 2021

\*Class Seminars, group discussion, PPTs, quiz will also be conducted.

\* There may be slight variation in it.

**Dr Punam Chauhan**  
**Dept. of Zoology**

## **L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

### **Teaching Plan for the session July 2019 to April 2020**

#### **B. Com 1<sup>st</sup> Year**

#### **Subject – Business organisation & Management (B.C.1.2)**

Unit	Topic	Details	Month	Remarks
1	Foundation of Indian business	Manufacturing & service sector, SME, Make in India movement, LPG, corporate social responsibility, franchising, out sourcing & e commerce.	July 2019 (4 Weeks)	
2	Business Enterprises	Forms of business organisations: sole trade, partnership, company, corporate organisation, LLP, HUF, International business, multi nation companies.	August- September 2019 (8Weeks)	
3	Management & organisation	Management an introduction, planning & strategy, decision making, Indian philosophy of management, departmentation & decentralisation, group dynamics & team building.	October- November 2019 (8Weeks)	
4	Leadership, Motivation & control	Leadership theories & styles, concept, importance & types of motivation, communication process & barriers, controlling.	December 2019 (4Weeks)	
5	Functional Areas of Management	Marketing management, PLC, Financial management, sources of funds, venture capital, and lease finance, SEBI, HRM.	February- March2022 (7 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 1<sup>st</sup> Year**

**Subject – Business Law (B.C.1.3)**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	The Indian Contract act 1872	Contract, meaning, characteristics & kinds. Essentials of valid contract, void agreements, discharge of contract, contingent contract & quasi contracts.	July- August 2019 (5 weeks)	
2	The Indian contract act 1872: specific contracts	Contract of indemnity & guarantee, contract of bailment, contract of agency.	August 2019 (3 Weeks)	
3	The sales of goods act 1930	Contract of sale, meaning & difference between sale & agreement to sell, condition & warranties, performance of contract of sale, unpaid seller.	September 2019 (4 Weeks)	
4	The Negotiable instrument act 1881	Meaning, characteristics & types of negotiable instruments: Promissory notes, bill of exchange, cheque. Holder & holder in due course, privileges of holder in due course, types of endorsement, crossing of cheque, blousing of cheque.	October- November 2019 (8 Weeks)	
5	The partnership act 1932	Nature & characteristics of partnership, registrations of firms, types of partner, rights & duties, implied authority of a partner, incoming & outgoing partners, modes of dissolution of partnership.  LLP act 2008: Feature of LLP, difference between LLP & Company, incorporation document, incorporation by registration, partner & their relationship.	December 2019 to February 2020 (6 Weeks)  February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 1<sup>st</sup> Year**

**Subject – Business Statistics & Mathematics (B.C.1.4)**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Business Mathematics	Matrices, types & calculation, mathematical functions & their types: linear, quadratic, polynomial, concept of limit & continuity, maxima minima, simple & compound interest.	July- August 2019 (8 Weeks)	
2	Univariate Analysis	Measure of central tendency: arithmetic mean, geometric mean & harmonic mean, mode & median, partition values, quartile, docile, percentile, measures of variation range, quartile deviation, standard & mean deviation, variance.	September- October 2019 (8Weeks)	
3	Bi-variate analysis	Simple linear co relation, Karl Pearson coff. Of co relation, spearman rank co relation, regression analysis, regression equation & estimation.	November- December 2019 (8 Weeks)	
4	Time based data	Meaning & uses of index numbers, construction of index number, simple & weighted average, test of adequacy of index number. Component of time series additive & multiplicative models, trend analysis, moving average methods & list square methods.	February to March 2020 (7 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 1<sup>st</sup> Year**

**Subject – Financial accounting (B.C.1.1)**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Theoretical Framework	Meaning, characteristics, functions, limitations, branches, nature, principles, conventions, bases of accounting, accounting standard, journals, ledger, trial balance.	July- August 2019 (8 Weeks)	
2	Business Income & Final Accounts	Measurement of business income, revenue recognition, depreciation, meaning & methods, inventories meaning & methods LIFO FIFO, final accounts, capital & revenue expenditure etc.	September 2019 (4 Weeks)	
3	Accounting for Hire purchase, consignment & joint venture	Journals entry & ledger of hire purchase, accounting treatment in the books of consignor & consignee, joint venture accounting procedure.	October- November 2019 (8 Weeks)	
4	Accounting for branches & dissolution of partnership firm	Concept of branches, accounting aspect, debtor system, branch final accounts & balance sheet, accounting of dissolution of the partnership firm including insolvency of partners.	December 2019 to February 2020 (6 Weeks)	
5	Practical & live projects	Comprised accounting system, Tally ERP	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**



**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject – company law**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Administration of Company Law [including National Company Law Tribunal (NCLT), National Company Law Appellate Tribunal (NCLAT), Special Courts]; Characteristics of a company; lifting of corporate veil; types of companies including one-person company, small company and dormant company; association not for profit; illegal association; formation of company, on-line filing of documents, promoters, their legal position, pre-incorporation contract; on-line registration of a company	July- August 2019 (8 Weeks)	
2	Documents	Memorandum of association, Articles of association, Doctrine of constructive notice and indoor management prospectus-shelf and red herring prospectus, Misstatement in prospectus, GDR; Book building; Issue, allotment and forfeiture of share, Transmission of shares, Buyback and provisions regarding buyback; Issue of bonus shares.	September 2019 (4 Weeks)	
3	Management	Classification of directors, women directors, independent director, small shareholder's director; Disqualifications, director identity number (DIN); Appointment; Legal positions, powers and duties; removal of directors; Key managerial personnel, managing director, manager. Meetings of shareholders and board; Types of meeting, convening and conduct of meetings, postal ballot, meeting through video conferencing, e-voting; Committees of Board of Directors- Audit Committee, Nomination and Remuneration Committee, Stakeholders Relationship Committee, Corporate Social Responsibility Committee	October- November 2019 (8 Weeks)	
4	Dividends, Accounts, Audit	Provisions relating to payment of Dividend, Provisions relating to Books of Account, Provisions relating to Audit, Auditors' Appointment, Rotation of Auditors, Auditors' Report, Secretarial Audit.	December 2019 to February 2020 (6 Weeks)	
5	Winding Up, Insider Trading, Whistle Blowing	Concept and modes of Winding Up. Insider-Trading; meaning and legal provisions; Whistle blowing:- Concept and Mechanism.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject – INCOME TAX LAW AND PRACTICE**

<u>Unit</u>	<u>Topic</u>	<u>Details</u>	<u>Month</u>	<u>Remarks</u>
1	Introduction	Basic concepts: Income, agricultural income, person, assessee, assessment year, previous year, gross total income, total income, maximum marginal rate of tax; Permanent Account Number (PAN) Residential status; Scope of total income on the basis of residential status Exempted income under section 10	July- August 2019 (8 Weeks)	
2	Computation of Income under different heads-1	a) Income from Salaries b) Income from house property	September 2019 (4 Weeks)	
3	Computation of Income under different heads-2	f) Profits and gains of business or profession g) Capital gains h) Income from other sources	October- November 2019 (8 Weeks)	
4	Computation of Total Income and Tax Liability	Income of other persons included in assessee's total income; Aggregation of income and set-off and carry forward of losses; Deductions from gross total income; Rebates and reliefs. Computation of total income of individuals and firms; Tax liability of an individual and a firm; Five leading cases decided by the Supreme Court	December 2019 to February 2020 (6 Weeks)	
Practical/ Live Projects	Preparation of Return of Income	Filing of returns: Manually, On-line filing of Returns of Income & TDS; Provision & Procedures of Compulsory On-Line filing of returns for specified assesses.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject - COMPUTER APPLICATIONS IN BUSINESS**

<u>Unit</u>	<u>Topic</u>	<u>Details</u>	<u>Month</u>	<u>Remarks</u>
1	Word Processing	Introduction to word Processing, Word processing concepts, Use of Templates, Working with word document: Editing text, Find and replace text, Formatting, spell check, Autocorrect, Auto text; Bullets and numbering, Tabs, Paragraph Formatting, Indent, Page Formatting, Header and footer, Tables: Inserting, filling and formatting a table; Inserting Pictures and Video; Mail Merge: including linking with Database; Printing documents Creating Business Documents using the above facilities	July- August 2019 (8 Weeks)	
2	Preparing Presentations	Basics of presentations: Slides, Fonts, Drawing, Editing; Inserting: Tables, Images, texts, Symbols, Media; Design; Transition; Animation; and Slideshow. Creating Business Presentations using above facilities	September 2019 (4 Weeks)	

3	Spreadsheet and its Business Applications	Spreadsheet concepts, Managing worksheets; Formatting, Entering data, Editing, and Printing a worksheet; Handling operators in formula, Project involving multiple spreadsheets, Organizing Charts and graphs Generally used Spreadsheet functions: Mathematical, Statistical, Financial, Logical, Date and Time, Lookup and reference, Database, and Text functions	October- November 2019 (8 Weeks)	
4	Creating Business Spreadsheet	Creating spreadsheet in the area of: Loan and Lease statement; Ratio Analysis; Payroll statements; Capital Budgeting; Depreciation Accounting; Graphical representation of data; Frequency distribution and its statistical parameters; Correlation and Regression	December 2019 to February 2020 (6 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject – CORPORATE ACCOUNTING**

<b><u>Unit</u></b>	<b><u>Topic</u></b>	<b><u>Details</u></b>	<b><u>Month</u></b>	<b><u>Remarks</u></b>
1	Accounting for Share Capital & Debentures	Issue, forfeiture and reissue of forfeited shares: concept & process of book building; Issue of rights and bonus shares; Buy back of shares; Redemption of preference shares; Issue and Redemption of Debentures	July- August 2019 (8 Weeks)	
2	Final Accounts, Valuation of Goodwill and Valuation of Share	Preparation of profit and loss account and balance sheet of corporate entities, excluding calculation of managerial remuneration, Disposal of company profits. Concepts and calculation of valuation of goodwill and shares: simple problems only.	September 2019 (4 Weeks)	
3	Amalgamation of Companies	Concepts and accounting treatment as per Accounting Standard: 14 (ICAI) (excluding intercompany holdings). Internal reconstruction: concepts and accounting treatment excluding scheme of reconstruction	October- November 2019 (8 Weeks)	
4	Accounting of Holding Companies	Preparation of consolidated balance sheet with one subsidiary company; Relevant provisions of Accounting Standard: 21 (ICAI).	December 2019 to February 2020 (6 Weeks)	
5	Accounting of Banking Companies and Cash Flow Statement	Difference between balance sheet of banking and non-banking companies; Prudential norms; Asset structure of a commercial bank; Non-performing assets (NPA). Concept of funds, Preparation of cash flow statement as per Indian Accounting Standard (Ind- AS): 7. Concept and modes of Winding Up. Insider-Trading; meaning and legal provisions; Whistle blowing:- Concept and Mechanism.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject - COST ACCOUNTING**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Meaning, objectives and advantages of cost accounting; Relationship between cost accounting and financial accounting; Cost concepts and classifications; Elements of cost; Cost Sheet, Installation of a costing system; Role of a cost accountant in an organisation	July- August 2019 (8 Weeks)	
2	Elements of Cost: Material	Material/inventory control techniques. Accounting and control of purchases, storage and issue of materials. Methods of pricing of materials issues — FIFO, LIFO, Simple Average, Weighted Average, Replacement, Standard Cost. Treatment of Material Losses	September 2019 (4 Weeks)	
3	Elements of Cost: Labour	Accounting and Control of labour cost. Time keeping and time booking. Concept and treatment of idle time, over time, labour turnover and fringe benefits. Methods of wage payment and the Incentive schemes- Halsey, Rowan, Taylor's Differential piece wage.	October- November 2019 (8 Weeks)	
4	Elements of Cost: Overheads. Book Keeping in Cost Accounting	Classification, allocation, apportionment and absorption of overheads; Under- and over-absorption; Capacity Levels and Costs; Treatments of certain items in costing like interest on capital, packing expenses, bad debts, research and development expenses; Activity based Costing & Service Costing (brief overview). Reconciliation of cost and financial accounts	December 2019 to February 2020 (6 Weeks)	
5	Methods of Costing	Job costing, Contract costing, Process costing (process losses, valuation of work-in-progress, joint and by-products)	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com 2<sup>st</sup> Year**

**Subject - E-COMMERCE**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Meaning, nature, concepts, advantages, disadvantages and reasons for transacting online, types of E-Commerce, e-commerce business models (introduction , key elements of a business model and Categorizing major E-commerce business models), forces behind	July- August 2019 (8 Weeks)	

		ecommerce. Technology used in E-commerce: The dynamics of world wide web and internet( meaning, evolution and features) ; Designing, building and launching e-commerce website (A systematic approach involving decisions regarding selection of hardware, software, outsourcing vs. in-house development of a website)		
2	Security and Encryption & IT Act 2000 and Cyber Crimes	Need and concepts, the e-commerce security environment (dimensions, definition and scope of e-security), security threats in the E-commerce environment (security instructions and breaches, attacking methods like hacking, sniffing, cyber-vandalism etc.), technology solutions (Encryption, security channels of communication, protecting networks and protecting servers as well as clients). IT Act 2000: Definitions, Digital signature, Electronic governance, Attribution, acknowledgement and dispatch of electronic records, Regulation of certifying authorities, Digital signatures certificates, Duties of subscribers, Penalties and adjudication, Appellate Tribunal, Offences and Cyber-crimes	September 2019 (4 Weeks)	
3	E-payment System	Models and methods of e-payments (Debit Card, Credit Card, Smart Cards, e-money), digital signatures (procedure, working and legal position), payment gateways, online banking (meaning, concepts, importance, electronic fund transfer, automated clearing house, automated ledger posting), risks involved in e-payments	October- November 2019 (8 Weeks)	
4	On-line Business Transactions	Meaning, purpose, advantages and disadvantages of transacting online, E-commerce applications in various industries like {banking, insurance, payment of utility bills, online marketing, e-tailing (popularity, benefits, problems and features), online services (financial, travel and career), auctions, online portal, online learning, publishing and entertainment} Online shopping (amazon, snapdeal, alibaba, flipkart, etc.)	December 2019 to February 2020 (6 Weeks)	
Practical	Website designing / E-business Managment	Introduction to HTML; tags and attributes: Text Formatting, Fonts, Hypertext Links, Tables, Images, Lists, Forms, Frames, Cascading Style Sheets/ E-payment system and online business transactions.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

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**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject – HUMAN RESOURCE MANAGEMENT**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Human Resource Management: Concept and Functions, Role, Status and competencies of HR Manager, HR Policies, Evolution of HRM, HRM vs HRD. Emerging Challenges of Human Resource Management; Workforce diversity; Empowerment; Downsizing; VRS; Human Resource Information	July- August 2019 (5 weeks)	
2	Acquisition of Human Resource	Human Resource Planning- Quantitative and Qualitative dimensions; job analysis – job description and job specification; Recruitment – Concept and sources; Selection – Concept and process; test and interview; placement and induction.	August September 2019 (5Weeks)	
3	Training and Development	Concept and Importance; Identifying Training and Development Needs; Designing Training Programmes; Role-Specific and Competency-Based Training; Evaluating Training Effectiveness; Training Process Outsourcing; Management Development; Career Development.	September- October 2019 (6 Weeks)	
4	Performance Appraisal	Nature, objectives and importance; Modern techniques of performance appraisal; potential appraisal and employee counselling; job changes - transfers and promotions; Compensation: concept and policies; job evaluation; methods of wage payments and incentive plans; fringe benefits; performance linked compensation	November – December 2019 (8 Weeks)	
5	Maintenance	Employee health and safety; employee welfare; social security; Employer-Employee relations- an overview; grievance-handling and 37 redressal; Industrial Disputes: causes and settlement machinery.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject- FUNDAMENTALS OF FINANCIAL MANAGEMENT**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Nature, scope and objective of Financial Management, Time value of money, Risk and return (including Capital Asset Pricing Model), Valuation of securities – Bonds and Equities.	July 2019 (4 Weeks)	
2	Investment Decision	The Capital Budgeting Process, Cash flow Estimation, Payback Period Method,	August- September	

		Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index, Capital budgeting under Risk – Certainty Equivalent Approach and Risk- Adjusted Discount Rate	2019 (8Weeks)	
3	Financing Decision	Cost of Capital and Financing Decision: Sources of long-term financing Estimation of components of cost of capital. Methods for Calculating cost of equity capital, Cost of Retained Earnings, Cost of Debt and Cost of Preference Capital, Weighted Average cost of capital (WACC) and Marginal cost of capital. Leverage- Operating, Financial & Degree of Leverage. Capital structure –Theories of 45 Capital Structure (Net Income, Net Operating Income, Traditional Approach and MM Hypothesis). Determinants of capital structure.	October- November 2019 (8Weeks)	
4	Dividend Decisions	Theories for Relevance and irrelevance of dividend decision for corporate valuation; Cash and stock dividends; Dividend policies in practice	December 2019 (4Weeks)	
5	Working Capital Decisions	Concepts of working capital, the risk-return trade off, sources of short-term finance, working capital estimation, cash management, receivables management, inventory management and payables management.	February- March2020 (7 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject- FUNDAMENTALS OF FINANCIAL MANAGEMENT**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction	Meaning, elements, determinants and importance of entrepreneurship and creative behaviour; Entrepreneurship and creative response to the society' problems and at work; Dimensions of entrepreneurship: intrapreneurship, technopreneurship, cultural entrepreneurship, international entrepreneurship, netpreneurship, ecopreneurship and social entrepreneurship	July-August 2019 (6Weeks)	
2	Entrepreneurship and Micro, Small and Medium Enterprises	Concept of business groups and role of business houses and family business in India; The contemporary role models in Indian business: their values, business philosophy and behavioural orientations; Conflict in family business and its resolution	August- September 2019 (6Weeks)	

3		Public and private system of stimulation, support and sustainability of entrepreneurship. Requirement, availability and access to finance, marketing assistance, technology, and industrial accommodation, Role of industries/entrepreneur's associations and self-help groups, The concept, role and functions of business incubators, angel investors, venture capital and private equity fund	September-October 2019 (8Weeks)	
4	Sources of business ideas and tests of feasibility	Significance of writing the business plan/ project proposal; Contents of business plan/ project proposal; Designing business processes, location, layout, operation, planning & control; preparation of project report (various aspects of the project report such as size of investment, nature of product, market potential may be covered); Project submission/ presentation and appraisal thereof by external agencies, such as financial/non-financial institutions	November-December 2019 (8Weeks)	
5	Mobilising Resources	Mobilising resources for start-up. Accommodation and utilities; Preliminary contracts with the vendors, suppliers, bankers, principal customers; Contract management: Basic start-up problems	February-March2020 (7 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject- PRINCIPLES OF MICRO ECONOMICS**

Unit	Topic	Details	Month	Remarks
1	Introduction To Demand and Supply	Determinants of demand, movements vs. shift in demand curve, Determinants of Supply, Movement along a supply curve vs. shift in supply curve; - Market equilibrium and price determination. Elasticity of demand and supply. Application of demand and supply	July 2019 (4 Weeks)	
2	Consumer Theory	Ordinal Utility theory: (Indifference curve approach): Consumer's preferences; Interference curves; Budget line; Consumer's equilibrium; Income and substitution effect; Price consumption curve and the derivation of demand curve for a commodity; Criticisms of the law of demand.	August-September 2019 (6Weeks)	
3	Production and Cost	a) Production: Firm as an agent of production. Concepts of Production function. Law of variable proportions; Isoquants; Return to scale. Economics and Diseconomies of scale. b) Costs: Costs in the short run. Costs in the	September-October 2019 (6Weeks)	



		long run, Profit maximization and cost minimization. Equilibrium of the firm, Technological Change: the very long run		
4	Market Structure	(a). Perfect Competition: Assumption; Theory of a firm under perfect competition; Demand and Revenue; Equilibrium of the firm in the short run and long run, The long run industry supply curve: increasing, decreasing and constant cost industry. Allocation efficiency under perfect competition (b). Monopoly: Short-run and long-run equilibrium of monopoly firm; Concept of supply curve under monopoly; Allocation inefficiency and dead-weight loss monopoly; Price discrimination. 53 (c). Imperfect Competition: Difference between perfect competitions, monopoly and imperfect competition; (i) Monopolistic Competition: Assumption; Short – run Equilibrium; Long run Equilibrium; Concepts of excess capacity; Empirical relevance. (ii) Oligopoly: Causes for the existence of oligopolistic firms in the market rather than perfect Competition; Cooperative vs. Non cooperative Behaviour and dilemma of oligopolistic firms.	November-December 2019 (8Weeks)	
5	Income Distribution and Factor Pricing	Demand for factors. Supply of factor, backward bending supply curve for labour concepts of economic rent; Functional Distribution of Income	February-March2020 (7 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject - MANAGEMENT ACCOUNTING**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction and Contemporary Issues	Meaning, Objectives, Nature and Scope of management accounting, Difference between cost accounting and management accounting, Cost control and Cost reduction, Cost management. Financial Statement Analysis – Common Size Statement, Comparative Statements, Trend Analysis and Ratio Analysis.	July- August 2019 (5 weeks)	
2	Marginal Costing	Absorption versus Variable Costing: Distinctive features and income determination. Cost-Volume-Profit Analysis, Profit / Volume ratio. Break-even analysis- algebraic and graphic methods. Angle of incidence, margin of safety, Key factor, determination of cost indifference point	August September 2019 (5Weeks)	
3	Decision Making	Steps in Decision Making Process, Concept of	September-	

		Relevant Costs and Benefits, Various short term decision making situations – profitable product mix, Acceptance or Rejection of special/ export offers, Make or buy, Addition or Elimination of a product line, sell or process further, operate or shut down. Pricing Decisions: Major factors influencing pricing decisions, various methods of pricing	October 2019 (6 Weeks)	
4	Budgetary Control	Budgeting and Budgetary Control: Concept of budget, budgeting and budgetary control, objectives, merits, and limitations. Budget administration. Functional budgets. Fixed and flexible budgets. Zero base budgeting. Programme and performance budgeting. Responsibility Accounting- Concepts and Significance	November – December 2019 (8 Weeks)	
5	Standard Costing	Standard Costing and Variance Analysis: Meaning of standard cost and standard costing, advantages, limitations and applications. Variance Analysis – material, labour, overheads and sales variances. Disposition of Variances, Control Ratios.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject - INTERNATIONAL BUSINESS**

<b>Unit</b>	<b>Topic</b>	<b>Details</b>	<b>Month</b>	<b>Remarks</b>
1	Introduction to International Business and International Business Environment	A) Introduction to International Business: Globalisation and its importance in world economy; Impact of globalization; International business vs. domestic business: Complexities of international business; Modes of entry into international business. B) International Business Environment: National and foreign environments and their components - economic, cultural and political-legal environments	July- August 2019 (5 weeks)	
2	Theories of International Trade and International Organisations and Arrangements	a) Theories of International Trade – an overview ( Classical Theories, Product Life Cycle theory, Theory of National Competitive Advantage); Commercial Policy Instruments - tariff and nontariff measures – difference in Impact on trade, types of tariff and non tariff barriers ( Subsidy, Quota and Embargo in detail) ; Balance of payment account and its components. b) International Organizations and Arrangements: WTO – Its objectives, principles, organizational structure and functioning; An overview of other organizations – UNCTAD,; Commodity and	August September 2019 (5Weeks)	

		other trading agreements (OPEC).		
3	Regional Economic Co-operation and International Financial Environment	a. Regional Economic Co-operation: Forms of regional groupings; Integration efforts among countries in Europe, North America and Asia (NAFTA, EU , ASEAN and SAARC) . b. International Financial Environment: International financial system and institutions (IMF and World Bank – Objectives and Functions) ; Foreign exchange markets and risk management; Foreign investments - types and flows; Foreign investment in Indian perspectiv	September-October 2019 (6 Weeks)	
4	Organisational Structure for International Business Operations and Developments and Issues in International Business	a. Organisational structure for international business operations; International business negotiations. b. Developments and Issues in International Business: Outsourcing and its potentials for India; Role of IT in international business; International business and ecological considerations.	November – December 2019 (8 Weeks)	
5	Foreign Trade Promotion Measures and Financing of Foreign Trade and Payment Terms	a. Foreign Trade Promotion Measures and Organizations in India; Special economic zones (SEZs) and export oriented units (EOUs), ; Measures for promoting foreign investments into and from India; Indian joint ventures and acquisitions abroad. b. Financing of foreign trade and payment terms – sources of trade finance ( Banks, factoring, forfaiting, Banker’s Acceptance and Corporate Guarantee) and forms of payment (Cash in advance, Letter of Credit, Documentary Collection, Open Account)	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject - PERSONAL SELLING AND SALESMANSHIP**

Unit	Topic	Details	Month	Remarks
1	Introduction to Personal Selling	Nature and importance of personal selling, myths of selling, Difference between Personal Selling, Salesmanship and Sales Management, Characteristics of a good salesman, types of selling situations, types of salespersons, Career opportunities in selling, Measures for making selling an attractive career	July- August 2019 (5 weeks)	
2	Buying Motives	Buying Motives: Concept of motivation, Maslow’s theory of need hierarchy; Dynamic nature of motivation; Buying motives and their uses in personal selling.	August September 2019 (5Weeks)	
3	Selling Process	Selling Process: Prospecting and qualifying; Pre-approach; Approach; Presentation and demonstration; handling of objections; Closing the sale; Post sales activities	September-October 2019 (6 Weeks)	

4	Sales Reports	Sales Reports: reports and documents; sales manual, Order Book, Cash Memo; Tour Diary, Daily and Periodical Reports; Ethical aspects of Selling	November – December 2019 (8 Weeks)	
5	Personal Selling and Merchandising	AIDA Model of selling, Distribution Networks relationship, Advertisement and Personal Selling.	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**L.B.S. Govt. Degree College Saraswatinagar Shimla (H.P.)**

**Teaching Plan for the session July 2019 to April 2020**

**B. Com Year III**

**Subject - INDIAN ECONOMY**

Unit	Topic	Details	Month	Remarks
1	Basic Issues and Features of Indian Econom	Concept and Measures of Development and Underdevelopment; Human Development; Composition of national income and occupational structure	July 2019 (4 weeks)	
2	Policy Regimes	a) The evolution of planning and import substituting industrialization. b) Economic Reforms since 1991. c) Monetary and Fiscal policies with their implications on economy .	August September 2019 (5Weeks)	
3	Growth, Development and Structural Change	a) The experience of Growth, Development and Structural Change in different phases of growth and policy regimes across sectors and regions. b) The Institutional Framework: Patterns of assets ownership in agriculture and industry; Policies for restructuring agrarian relations and for regulating concentration of economic power; c) Changes in policy perspectives on the role of institutional framework after 1991. d) Growth and Distribution; Unemployment and Poverty; Human Development; Environmental concerns. e) Demographic Constraints: Interaction between population change and economic development.	September- October 2019 (7 Weeks)	
4	Sectoral Trends and Issues	a) Agriculture Sector: Agrarian growth and performance in different phases of policy regimes i.e. pre green revolution and the two phases of green revolution; Factors influencing productivity and growth; the role of technology and institutions; price policy, the public distribution system and food security. b) Industry and Services Sector: Phases of Industrialisation – the rate and pattern of	November – December 2019 (8 Weeks)	

		<p>industrial growth across alternative policy regimes; Public sector – its role, performance and reforms; The small scale sector; Role of Foreign capital.</p> <p>c) Financial Sector: Structure, Performance and Reforms. Foreign Trade and balance of Payments: Structural Changes and Performance of India's Foreign Trade and Balance of Payments; Trade Policy Debate; Export policies and performance; Macro Economic Stabilisation and Structural Adjustment; India and the WTO, Role of FDI, Capital account convertibility</p>		
5	Inflation, Unemployment and Labour Market	<p>Inflation: Causes of rising and falling inflation, inflation and interest rates, social costs of inflation; Unemployment – natural rate of unemployment, frictional and wait unemployment. Labour market and its interaction with production system; Phillips curve, the tradeoff between inflation and unemployment, sacrifice ratio, role of expectations adaptive and rational.</p>	February to March 2020 (5 Weeks)	

**Note: Assignments, class test & midterm will be taken during the session.**

**LBS Govt. P.G. College Saraswatinagar**  
**Lesson plan for the session 2020-21**  
**Department of computer Science and Technology**  
**Class- BCA 1<sup>st</sup>Sem**

**COURSE NAME – MATHEMATICS-1**

**CORSE CODE: BCA0101**

**Credits: 4**

Unit	Topic	Months	activity
1. ALGEBRA	1. Set theory 2. Relations 3. Quadratic equations 4. Sequence and series 5. Binomial theorem 6. Matrices and determinants	July 2020	assignment Class test
2.COORDINATE GEOMETRY	1. <u>Rectangular coordinates</u> 2. <u>Section ratio</u> 3. <u>Area of triangle</u> 4. <u>Equation of straight lines</u> 5. <u>circle</u>	August 2020	assignment Class test
3.TRIGONOMETRY  4.CALCULAS	1.T-fuctions , ratios 2.Height and distances 3. Function 4. Limit and continuity 5. Derivative	September, 2020	assignment Class test
4.CALCULAS	1. Maxima and minima 2. revision 3. test	October, 2020	assignment Class test

**Course Title:- Applied English**

**Course Code:-BCA0102**

**Credits: 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Comprehension : One unseen passages of 250-300 words in length with a variety of comprehension questions including 05 marks for word attack skills such as word formation and inferring meaning, finding opposites etc. The passage can be a factual passage (e.g., instruction, description, report etc.) or a literary passage (e.g., extract from fiction, drama, poetry, essay or biography), or a discursive passage involving opinion, (argumentative, persuasive or interpretative text).	July 2020	1. Assignments 2. Class tests 3. Presentation 4. Code- Practical
UNIT –II	Vocabulary: Change the Number, Change the Gender, Words commonly misspelt, Antonyms, Synonyms, Fill up using correct determinants.	August 2020	“
UNIT-III	Filling up the correct form types of the tense in the sentence: present/ past /future tense with simple/continuous/perfect/ perfect continuous forms, Reordering word groups in the sentence to make a meaningful sentence, Writing meaning of given word and using in the sentence. Conversion among various types of sentences: affirmative, interrogative sentences, negation, exclamations.	September, 2020	“
UNIT-IV	Composition: Composition on a given topic/title based on any current social, environment, health issues. Formal Letter Writing (invitation, accepting/rejecting an invitation, apology, welcome, thanking compliments)	October, 2020	“

**Course Title:- Computer Fundamental**

**Course Code:- BCA0103**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Introduction: Characteristics of Computers, Evolution of computers, Capabilities and limitations of computers, Generations of computers, Types of computers(micro, mini, main frame, supercomputers), Block diagram of computer, Basic components of a computer system0 Input unit, output unit, Arithmetic logic Unit, Control unit, central processing unit, Instruction set, registers, processor speed, type of processors.	July 2020	1. Assignments 2. Class tests 3. Presentation 4. Code- Practical
UNIT –II	Memory: main memory organization, main memory capacity, RAM, ROM, EPROM, PROM, cache memory, PCs specifications. Secondary Storage Devices- Magnetic Tape, Magnetic Disks0Internal Hard Disk, External Hard Drives, Floppy Disks, Optical Disks-CD, VCD, CD-R, CD-RW, DVD, Solid State Storage0Flash Memory, USB Drives.	August 2020	“
UNIT-III	Input devices: Keyboard, Pointing Devices0mouse, Touch Screens, Joystick, Electronic pen, Trackball, Scanning Devices-Optical Scanners, OCR, OMR, Bar Code Readers, MICR, Digitizer, Electronic card reader, Image Capturing Devices-Digital Cameras. Output devices- Monitors0 CRT, LCD/TFT, Printers- Dot matrix, Inkjet, Laser, Plotters- Drum, Flatbed, Screen image projector.	September, 2020	“
UNIT-IV	Computer Software: Software and its Need, Types of software0System software, Application software, System software0operating system, utility program, programming languages, assemblers, compilers and interpreter, introduction to operation system for PCs-DOS, windows, linux, file allocation table (FAT & FAT32), files & directory structure and its naming rules, programming languages0machine, assembly, high level, 4GL, their merits and demerits, application software and its types – word0processing, spreadsheet, presentation graphics	October, 2020	“



**Course Title:- C Programming****Course Code:- BCA0104****Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Introductory Concepts: Types of programming languages, Introduction to C, some simple C programs, Desirable program characteristics. C Fundamentals: C character Set, Identifiers and keywords, data types, constants, variables and arrays, Declarations, expressions, statements, Symbolic constants.	July 2020	5. Assignments 6. Class tests 7. Presentation 8. Code- Practical
UNIT –II	Operators and expressions: Arithmetic operators, unary operator, Relational and logical operators, assignment operators, conditional operators, Library Functions. Data Input and Output: Preliminaries, single character input, single character output, Entering input data, writing output data, the gets() and puts() function.	August 2020	“
UNIT-III	Control Statements: Preliminaries, Branching, Looping, Nested control statements, switch statement, break statement, The continue statement, The goto statement, The comma operator. Arrays: Defining an array, processing an array, passing arrays to functions, Multidimensional arrays, Arrays and strings.	September, 2020	“
UNIT-IV	Functions: A brief overview, Defining a function, accessing a function, function prototypes, passing arguments to a function, recursion. Pointers: Fundamentals, Pointer declarations, Passing pointers to the functions, pointers and one dimensional array, dynamic memory allocation, Operations on pointers, arrays of pointers.	October, 2020	“

**Course Title:- C Programming lab-I****Course Code:- BCA0104(P)****Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	variables and arrays, Declarations, expressions, statements, Symbolic constants.	July 2020

UNIT –II	Operators and expressions: Arithmetic operators, unary operator, Relational and logical operators, assignment operators, conditional operators, Library Functions. Data Input and Output: Preliminaries, single character input, single character output, Entering input data, writing output data, the gets() and puts() function.	August 2020
UNIT-III	Control Statements: Preliminaries, Branching, Looping, Nested control statements, switch statement, break statement, The continue statement, The goto statement, The comma operator. Arrays: Defining an array, processing an array, passing arrays to functions, Multidimensional arrays, Arrays and strings.	September, 2020
UNIT-IV	Functions: A brief overview, Defining a function, accessing a function, function prototypes, passing arguments to a function, recursion. Pointers: Fundamentals, Pointer declarations, Passing pointers to the functions, pointers and one dimensional array, dynamic memory allocation, Operations on pointers, arrays of pointers.	October, 2020

**Course Title:-Office Automation Tool**

**Course Code:- BCA0105**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	DOS commands: (internal (DIR, DATE, TIME, CLS, CD, RD, MD, PATH, TYPE, DEL, ECHO, COPY, REN, PROMPT, VOL, VER), external (ATTRIB, CHKDSK, DISKCOPY, DISKCOMP, XCOPY, TREE, DELTREE, DOSKEY, FORMAT, FIND, SORT, FDISK, MORE, SYS)), Concept of files & directories, Wild card characters, Redirection operators. Windows 2007: Definition, Benefits, Features & uses of Windows 2007, Control panel, Accessories, Task bar, My computer uses, Recycle bin.	July 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	. Common Office 2007: Elements, Introduction to Office 2007, Customizing the Office Environment, Managing Files in Office, Text Tools, Drawing and Graphics Tools. Word Processing: Definition, Benefits, Features & uses of Word 2007, Menus, Toolbars, Cursor control keys, Short cut keys, Hot keys, Editing Text, Document Formatting, Reusable formatting with Styles and Templates, File handling (opening, creating, saving, printing, editing), Formatting text, Find and replace, Tables and Columns, Advanced Page Layout in Word, Automating Information with Fields, Managing Long Documents, Spell check, Thesaurus, File protection, Mail Merge, Labels, and Envelopes, Macros	August 2020	“
	Spreadsheets: Definition, Benefits, Features & Uses of MS Excel 2007, Menus, Toolbars, Worksheets, Formatting Worksheets and Restricting Data, Calculating with	September, 2020	“

UNIT-III	Formulas and Functions, Ranges, Auto fill, Data (sort, filter, validation, subtotal), Viewing and Manipulating Data with charts and PivotTables, Print, Goal seek, Scenario, Macros, Creating Excel Databases.		
UNIT-IV	Presentations: Definition, Benefits, Features & Uses of PowerPoint, Menus, Toolbars, Creating and Editing Slides, Adding graphics, Multimedia, and Special Effects to Slides, Insert (picture, slide, text), Master slide, Views, Animation, Action buttons, Macros.	October, 2020	“

**Course Title:-Office Automation Tool lab -II      Course Code:- BCA0105(P)**  
**Total Credits:- 3**

Units	Topics	Time /Duration
UNIT-I	DOS commands: (internal (DIR, DATE, TIME, CLS, CD, RD, MD, PATH, TYPE, DEL, ECHO, COPY, REN, PROMPT, VOL, VER), external (ATTRIB, CHKDSK, DISKCOPY, DISKCOMP, XCOPY, TREE, DELTREE, DOSKEY, FORMAT, FIND, SORT, FDISK, MORE, SYS)), Concept of files & directories, Wild card characters, Redirection operators. Windows 2007: Definition, Benefits, Features & uses of Windows 2007, Control panel, Accessories, Task bar, My computer uses, Recycle bin.	July 2020
UNIT –II	. Common Office 2007: Elements, Introduction to Office 2007, Customizing the Office Environment, Managing Files in Office, Text Tools, Drawing and Graphics Tools. Word Processing: Definition, Benefits, Features & uses of Word 2007, Menus, Toolbars, Cursor control keys, Short cut keys, Hot keys, Editing Text, Document Formatting, Reusable formatting with Styles and Templates, File handling (opening, creating, saving, printing, editing), Formatting text, Find and replace, Tables and Columns, Advanced Page Layout in Word, Automating Information with Fields, Managing Long Documents, Spell check, Thesaurus, File protection, Mail Merge, Labels, and Envelopes, Macros	August 2020
UNIT-III	Spreadsheet , Menus, Toolbars, Worksheets, Formatting Worksheets and Restricting Data, Calculating with Formulas and Functions, Ranges, Auto fill, Data (sort, filter, validation, subtotal), Viewing and Manipulating Data with charts and PivotTables, Print, Goal seek, Scenario, Macros, Creating Excel Databases.	September, 2020
UNIT-IV	Presentations: Menus, Toolbars, Creating and Editing Slides, Adding graphics, Multimedia, and Special Effects to Slides, Insert (picture, slide, text), Master slide, Views, Animation, Action buttons, Macros.	October, 2020

Figure 1

**Class- BCA 3<sup>rd</sup> Sem.**

**COURSE NAME – MATHEMATICS-III**

**CORSE CODE: BCA0301**

**Credits: 4**

Unit	Topic	Months	Activity
1. Differential equation	1.order and degree 2. Solution and formation of differential eqn. 3. solution of linear eqn. with constant coefficient 4. Cauchy and Legendre's equations	July 2020	assignment Class test
2. Complex analysis	1.complex number 2.modulus and argument 3.square root, cube root of unity 4. de-moivre's theorem	August 2020	assignment Class test
3. Number theory  4.Group theory	1. primes, factorization 2. Chinese remainder theorem 3.quadratic congruence 4. Finite Field	September, 2020	assignment Class test
4.Group theory	1. GF(p) fields 2. polynomials and their operation over finite field 3.Revision 4.Test	October, 2020	assignment Class test

**Course Title: - Business Practices & Management**

**Course Code: – BCA0302**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
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UNIT-I	Concepts of Business: Commerce and Industry, Business Environment, Macro and Micro Environment, Business System, Forms of Business Organization.	July 2020	1. Assignments 2. Class tests 3. Presentation 4. Code - Practical
UNIT –II	Management: Meaning, definition and importance, Management concept, functions, Principles of management and Management Process.	August 2020	“
UNIT-III	Planning: concepts and its types, Decision making concept, Management by objectives (M.B.O.). Motivation0Concepts and theories, Leadership0 Concepts and styles.	September , 2020	“
UNIT-IV	Organizing: Concepts, Nature and Significance, Authority and responsibility, Centralization and Decentralization, Communication0 Nature, Process and types of communication networks. Managerial control 0 concepts and Process, Techniques of control.	October, 2020	“

**Course Title:- Computer Organization**

**Course Code:- BCA0303**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Data representation: number systems, decimal to binary, octal and hexadecimal conversion and vice versa, binary coded decimal numbers, hamming code for error detection, alphanumeric codes, arithmetic operations, binary addition and subtraction, addition/subtraction of numbers in 1's and 2's complement notation for binary numbers and 9's and 10's complement notation for decimal numbers, binary multiplication and division, BCD arithmetic, floating point addition and subtraction.	July 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	Register Transfer Language: Register transfer, Bus and Memory transfer (three-stage bus buffers, memory transfer), arithmetic microoperations (Binary Adder, Binary-adder-Subtractor, binary incremter, arithmetic circuit), Logic micro-operation (list op logic micro operations, hardware implementation), shift micro0operations (hardware implementation), arithmetic logic shift unit.	August 2020	“
UNIT-III	Instruction codes: (stored program organization, indirect address), computer registers (common bus register), computer instructions (instruction set completeness), timing and control, instruction cycle (fetch and decode, types of instruction, register-reference instructions), Micro programmed control, control memory, addressing sequencing (conditional branching, mapping of instructions, subroutine)	September, 2020	“

UNIT-IV	Central Processing Unit: Introduction, general register organization (control word, examples of micro-operations), stack organization (register stack, memory stack, reverse polish notation, evaluation of arithmetic expressions), instruction formats (three-address instructions, two address instructions, one0address instructions), addressing modes, data transfer and manipulation (data transfer instructions, data manipulation instructions, arithmetic instructions, logical and bit manipulation instructions, shift instructions), Program control (status bit conditions, conditional branch instructions, program interrupt, types of interrupt).	October, 2020	“
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**Course Title: - Object Oriented Programming with C++**

**Course Code: – BCA0304**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Object oriented programming: Need for OOP, object oriented approach, characteristics of OOP language-objects, classes, Inheritance, Reusability, Polymorphism, overloading advantage of OOP, relationship between C and C++. Programming Basic: Basic program construction, output using cout, preprocessor directive, comments, integer variables, character variables, input with cin, Type bool, setw Manipulator, type float, type conversion, arithmetic operators, relational operators, logical operators.	July 2020	4. Assignments 5. Class tests 6. Presentation 7. Code - Practical
UNIT –II	Loops and decision control statements: loop- for, while, do, decision-if, if- else, switch, conditional operator, other control statements- break, continue, goto. Structures and functions: structures, Accessing structure members, structure within a structure, Enumerated Data type, simple functions, passing arguments to functions, Returning values from functions, reference arguments, overloaded functions, storage classes, scope resolution operator	August 2020	“
UNIT-III	Objects and classes: A simple class, classes and objects, specifying a class, using a class, C++ objects as physical objects, C++ objects as data types, Constructors, objects as function arguments, returning objects from functions. Arrays: Array fundamental0defining array, array elements, Accessing array elements, Initializing arrays, multidimensional arrays, passing arrays to functions, array of objects, strings-string variables, Avoiding Buffer overflow, string constants, array of strings string as class members, Standard C++ string Class.	September , 2020	“

UNIT-IV	Operator overloading: Overloading unary operators- the operator keyword, operator arguments, operator return values nameless temporary objects, limitation of increment operators, overloading Binary operators, data conversion, Pitfalls of operator overloading and conversion. Inheritance: Derived class and base class, specifying the derived class, accessing base class, members, derived class constructors, overriding member functions, class hierarchies, public and private Inheritance, levels of inheritance, multiple inheritance, Ambiguity in Multiple Inheritance, Aggregation- Classes Within Classes.	October, 2020	“
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**Course Title: - Object Oriented Programming with C++ lab-V      Course Code: –BCA0304(P)**  
**Total Credits:- 3**

Units	Topics	Time /Duration
UNIT-I	Programming Basic: Basic program construction, output using cout, preprocessor directive, comments, integer variables, character variables, input with cin, Type bool, setw Manipulator, type float, type conversion, arithmetic operators, relational operators, logical operators.	July 2020
UNIT –II	Loops and decision control statements: loop- for, while, do, decision-if, if- else, switch, conditional operator, other control statements- break, continue, goto. Structures and functions: structures, Accessing structure members, structure within a structure, Enumerated Data type, simple functions, passing arguments to functions, Returning values from functions, reference arguments, overloaded functions, storage classes, scope resolution operator	August 2020
UNIT-III	Objects and classes: A simple class, classes and objects, specifying a class, using a class, C++ objects as physical objects, C++ objects as data types, Constructors, objects as function arguments, returning objects from functions. Arrays: Array fundamental0defining array, array elements, Accessing array elements, Initializing arrays, multidimensional arrays, passing arrays to functions, array of objects, strings-string variables, Avoiding Buffer overflow, string constants, array of strings string as class members, Standard C++ string Class.	September , 2020
UNIT-IV	Operator overloading: Overloading unary operators- the operator keyword, operator arguments, operator return values nameless temporary objects, limitation of increment operators, overloading Binary operators, data conversion, Pitfalls of operator overloading and conversion. Inheritance: Derived class and base class, specifying the derived class, accessing base class, members, derived class constructors, overriding member functions, class hierarchies, public and private Inheritance, levels of inheritance, multiple inheritance, Ambiguity in Multiple Inheritance, Aggregation- Classes Within Classes.	October, 2020

**Course Title: - Desktop Publishing and Designing**

**Course Code: - BCA0305**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	D.T.P For Publications: Introductions to Printing , Types of Printing, Offset Printing, Working of offset Printing, Transparent Printout, Negative & Positives for Plate were making, Use of Desk Top Publishing in Publications, Importance of D.T.P in Publication, Advantage of D.T.P in Publication, Mixing of graphics & Image in a single page production, Laser printers Use, Types, Advantage of lager printer in publication.	July 2020	1. Assignments 2. Class tests 3. Presentation 4. Code - Practical
UNIT –II	Page Layout: Different page format / Layouts, News paper page format, Page orientations, Columns & Gutters, Printing in reduced sizes. Page Maker: Introductions To Page Maker Icon and help, Tool Box, Styles, Menus etc., Different screen Views, Importing text/Pictures, Auto Flow, Columns, Master Pages and Stories, Story Editor, Menu Commands and short0cut commands, Spell check, Find & Replace, Import Export etc., Fonts, Points Sizes, Spacing etc., Installing Printers, Scaling (Percentages), Printer setup.	August 2020	“
UNIT-III	Use Of D.T.P: Use of D.T.P. in Advertisements, Books & Magazines, News Paper, Table Editor. Adobe Photoshop: Introduction to Photoshop & Flash, Documents, Various Graphic Files	September , 2020	“
UNIT-IV	Extensions Vector Image and Raster Images, Various Colour Modes and Models. Introduction to Screen and Work Area, Photoshop Tools & Palettes ,Use of Layers & Filters Working with Images.	October, 2020	“

**Course Title: - Desktop Publishing and Designing lab-VI**

**Course Code: - BCA0305(P)**

**Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	D.T.P For Publications: Offset Printing, Working of offset Printing, Transparent Printout, Negative & Positives for Plate were making, Use of Desk Top Publishing in Publications, Importance of D.T.P in Publication, Advantage of D.T.P in Publication, Mixing of graphics & Image in a single page production, Laser printers Use, Types, Advantage of lager printer in publication.	July 2020



UNIT –II	Page Layout: Different page format / Layouts, News paper page format, Page orientations, Columns & Gutters, Printing in reduced sizes. Page Maker: Introductions To Page Maker Icon and help, Tool Box, Styles, Menus etc., Different screen Views, Importing text/Pictures, Auto Flow, Columns, Master Pages and Stories, Story Editor, Menu Commands and shortcut commands, Spell check, Find & Replace, Import Export etc., Fonts, Points Sizes, Spacing etc., Installing Printers, Scaling (Percentages), Printer setup.	August 2020
UNIT-III	Use Of D.T.P: Use of D.T.P. in Advertisements, Books & Magazines, News Paper, Table Editor. Adobe Photoshop: Introduction to Photoshop & Flash, Documents, Various Graphic Files	September , 2020
UNIT-IV	Extensions Vector Image and Raster Images, Various Colour Modes and Models. Introduction to Screen and Work Area, Photoshop Tools & Palettes ,Use of Layers & Filters Working with Images.	October, 2020

**Class- BCA 5<sup>th</sup>Sem.**

**Course Title:-Operating System**

**Course Code:- BCA0501**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Operating System Concepts: Operating System Classification- Simple Monitor, Multi Programming, Time Sharing, Real Time Systems, Multiprocessor Systems, Batch Processing, Simple User, Multi User, Operating System Functions And Characteristics.	July 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	Processor Management: Process Overview, Process States, Process State Transitions, Process Control Block, Operations On Processes, Suspend And Resume, Interrupt Processing, Scheduling Algorithms, Multiple Processor Scheduling. Deadlock: Deadlock Problem, Deadlock, Deadlock Characterization, Necessary Conditions, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery From Deadlock.	August 2020	“

UNIT-III	Memory Management: Partition, Paging, Segmentation, Types Of Memory Management Scheme , Bare Machine, Resident Monitor, Swapping, Multiple Partition, Virtual Memory, Demand Paging.	September, 2020	“
UNIT-IV	File Management: File Types, Operation On Files, File Support, Access Methods, Sequential Access, Direct Access, Index, Allocation Method (Free Space Management, Contiguous, Linked, Indexed), Directory System Single-Level, Two-Level, TreeStructured, File Protection.	October, 2020	“

**Course Title:- e-Commerce**

**Course Code:- BCA0502**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	e-Commerce: Definition, Framework, Architecture, benefits and Impact of e-Commerce, The Anatomy of e-Commerce application, eCommerce Consumer applications, e-Commerce Organization Application, e-commerce in India, Prospects of e-Commerce.	July 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	Consumer0oriented E-Commerce: Consumer0oriented applications, mercantile Process Models, consumer’s perspective, Merchant’s perspective. Advertising and marketing on the Internet: The new age information based marketing, Advertising on the Internet Active or push0based advertising models, Passive or pull based advertising models. Guidelines for Internet advertising. Online marketing process	August 2020	“
UNIT-III	Types of Electronic Payment System: Digital token0based electronic payment systems, smart cards and electronic payment systems, credit card0based electronic payment systems, Risk and electronic payment systems. Electronic data Interchange and its applications in business.	September, 2020	“
UNIT-IV	Securing the Business on Internet: security Policy, Procedures and Practices, transaction security, CRM, what is e-CRM, it’s applications, The e-CRM marketing in India, Major Trends, Global Scenario for eCRM, CRM utility in India.	October, 2020	“

**Course Title:- Management Information System**

**Course Code:- BCA0503**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Management Information System: Definition, Meaning and Role of Management Information System Introduction, Definition, System's Approach, Pitfalls in Management Information Systems. Development of Organizational Theory: Management & Organizational Behaviour, Management, Information & System Approach.	July 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	Data Processing: Operation of Manual Information System, Components of Computer System, Conversion of Manual to Computer Based Systems, Data Bank Concept, Types of Computer Based Applications. Information System for Decision Making: Evolution of Information System, Decision Making & Management Information System.	August 2020	“
UNIT-III	Strategic & Project Planning for Management Information System: Business Planning, Management Information System Responses, Management Information System Planning0 General & Details. Conceptual System Design: Define Problem, Set System Objective, Establish System Constraints, Determine Information Needs & Sources, Develop Alternative Conceptual Design & Documentation, Prepare the Design Report.	September, 2020	“
UNIT-IV	Detailed System Design: Aim, Project Management, Define Subsystem, Input, Output & Process Design, System Testing, Software & Hardware selection, Documentation of Detailed Design.	October, 2020	“

**Course Title:-ASP.Net Technologies**

**Course Code:- BCA0504**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Introducing .NET: Microsoft web development, Move from workstation to distributed computing, Internet factor, importance of .net platform OS neutral environment, device independence, wide language support, internet based component services. .NET framework: Common language runtime(CLR), code management and execution, security support, error handling and garbage collection,.net framework class libraries System classes, data and XML classes, windows form and drawing classes, web classes. Features of .NET framework: ASP.NET web forms and web services Web page authoring & server controls, ASP.NET infrastructure.	July 2020	4. Assignments 5. Class tests 6. Presentation
UNIT –II	VB.NET : Introduction, statement, lines, comments, operators, procedures, variables implicit, explicit, constants, parameters, arrays, branching, looping, objects, classes, inheritance, accessibility of inherited properties and methods, overriding methods. System class, working with numbers, manipulating strings, DateTime arithmetic, converting values, formatting values, managing arrays. Namespace and assemblies, Relating namespaces and DLL assemblies, creating assemblies, importing assemblies, using imported assemblies, compiling with imported namespace.	August 2020	“
UNIT-III	ASP.NET Web Forms: Web forms code model, In-page vs. Code behind format, web form object life cycle, handling client side events on the server, web form event handling, define and respond web form control events, AutoPostBack property, automatic state management with web forms. HTML server control: definition, RunAt server attribute, HTML control class, General controls-Anchor, image, form, division, span, Table control, Input Control. Web server Control: Web Control class, General control- Hyperlink, link button, image, label, Panel, Form Controls, Table controls.	September, 2020	“
UNIT-IV	Web form List Control: Simple List controls, Template List controls. Validation Controls: Definition, properties and methods of validation controls, validation controls RequiredFieldValidator, Compare Validator, RangeValidator, RegularExpressionValidator, CustomValidator, ValidationSummary. User Controls: Definition, Markup Only User Control, Custom properties, handling events and loading user controls dynamically.	October, 2020	“

**Course Title:-ASP.Net Technologies lab-IX**

**Course Code:- BCA0504(P)**

**Total Credits:- 3**

Units	Topics	Time /Duration
UNIT-I	.NET framework: Common language runtime(CLR), code management and execution, security support, error handling and garbage collection,.net framework class libraries0System classes, data and XML classes, windows form and drawing classes, web classes. Features of .NET framework: ASP.NET web forms and web services0 Web page authoring & server controls, ASP.NET infrastructure.	July 2020
UNIT –II	VB.NET : Introduction, statement, lines, comments, operators, procedures, variables0 implicit, explicit, constants, parameters, arrays, branching, looping, objects, classes, inheritance, accessibility of inherited properties and methods, overriding methods. System class, working with numbers, manipulating strings, DateTime arithmetic, converting values, formatting values, managing arrays. Namespace and assemblies, Relating namespaces and DLL assemblies, creating assemblies, importing assemblies, using imported assemblies, compiling with imported namespace.	August 2020
UNIT-III	ASP.NET Web Forms: Web forms code model, In-page vs. Code0behind format, web form object life cycle, handling client side events on the server, web form event handling, define and respond web form control events, AutoPostBack property, automatic state management with web forms. HTML sever control: definition, RunAt sever attribute, HTML control class, General controls-Anchor, image, form, division, span, Table control, Input Control. Web server Control: Web Control class, General control- Hyperlink, link button, image, label, Panel, Form Controls, Table controls.	September, 2020
UNIT-IV	Web form List Control: Simple List controls, Template List controls. Validation Controls: Definition, properties and methods of validation controls, validation controls RequiredFieldValidator, Compare Validator, RangeValidator, RegularExpressionValidator, CustomValidator, ValidationSummary. User Controls: Definition, Markup0Only User Control, Custom properties, handling events and loading user controls dynamically.	October, 2020

**COURSE NAME – Computer Oriented Statistical Method**

**COURSE CODE: BCA0505**

Credits: 4

Unit	Topic	Months	Activity
1. Statistics	1.frequency distribution 2. mean 3. mode 4. median 5. dispersion	July 2020	assignment Class test

2. Probability	<ol style="list-style-type: none"> <li>1. addition and multiplication theorem</li> <li>2. conditional probability</li> <li>3. independent events</li> </ol>	August 2020	assignment Class test
3 Mathematical expectation	<ol style="list-style-type: none"> <li>1. expected value of function of random variable</li> <li>2. variance and covariance</li> <li>3. test</li> </ol>	September, 2020	assignment Class test
4. Correlation	<ol style="list-style-type: none"> <li>1. Karl's Pearson coefficient</li> <li>2. rank correlation</li> <li>3. revision</li> </ol>	October, 2020	assignment Class test

**COURSE NAME – Computer Oriented Statistical Methods lab -X**

**CORSE CODE: BCA0505(P)**

Credits: 3

Unit	Topic	Months
Statistics	frequency distribution mean mode median dispersion	July 2020
	addition and multiplication theorem	

Probability	conditional probability independent events	August 2020
Mathematical expectation	expected value of function of random variable variance and covariance	September, 2020
Correlation	Karl's Pearson coefficient rank correlation	October, 2020

**LBS Govt. P.G. College Saraswatinagar**  
**Lesson plan for the session 2020-21**  
**Department of computer Science and Technology**  
**Class- BCA 2<sup>nd</sup> Sem**

**COURSE NAME – MATHEMATICS-II**

**CORSE CODE: BCA0201**

**Credits: 4**

Unit	Topic	Months	activity
Calculus	<ol style="list-style-type: none"> <li>1. Rolles theorem, Lagranges mean value theorem, Cauchy's mean value theorem their geometrical significance and application.</li> <li>2. successive differentiation</li> </ol>	Dec, 2020	assignment Class test
Number theory	<ol style="list-style-type: none"> <li>1. Division algorithm, greatest common divisor, least common multiple.</li> <li>2. Congruence relation, integer arithmetic, modular arithmetic</li> </ol>	Feb, 2021	assignment Class test
Algebra	<ol style="list-style-type: none"> <li>1. Groups : definition , groups of numbers, groups of residue, groups of matrices, groups of functions.</li> <li>2. Properties of groups, characterization of groups</li> <li>3. Cyclic groups.</li> </ol>	March, 2021	assignment Class test
Algebra	<ol style="list-style-type: none"> <li>1. Ring : types of ring, ring of polynomials, rings of functions, properties of rings</li> <li>2. Fields.</li> </ol>	April, 2021	assignment Class test



**Course Title:- Communicative English**

**Course Code:-BCA0202**

**Credits: 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Vocabulary: Fill up using correct form of verb, Usage of the adverb, adjective etc, Write Antonym of the given word and use both the given word and its antonym in the single sentence clarifying meaning and usage, Give different meanings to Synonyms and use them in sentences , Give meaning and make sentences using idioms.  Grammar: Conversion among various types of the tenses in the sentence: present/ past /future tense with simple/continuous/perfect forms , Conversion between Direct/Indirect speech , Conversion between active/passive voice , Conversion among various types of sentences: affirmative, interrogative sentences, negation, exclamations	Dec, 2020	1. Assignments 2. Class tests 3. Presentation 4. Code- Practical
UNIT –II	. Skills in Writing: letters, official/business correspondence. CV's, Tech. Reports/types, Precis, comprehension, Paragraph writing (200 word) on current topics, writing notices, agenda, circulars.	Feb, 2021	“
UNIT-III	Secretarial Skills: Effective communication, listening and feedback skills, telephone handling, Attending meeting, preparing of agenda, writing of minutes, summaries. Handling problem situations. Control of voice and proper use of phonetics.	March, 2021	“
UNIT-IV	Presentation and Discussion Skills: Types of communication. Barriers to Communication. Effective use of kinesics, Planning interviews and making presentations. Taking initiatives, especially in group discussions, overcoming nervousness, making audience analyses and establishing leadership.	April, 2021	“

**Course Title:- Digital Electronics****Course Code:- BCA0203****Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Fundamentals of semiconductor physics: Energy bands in solids, pn junction diode depletion region, forward and reverse bias, diode as switch; Bipolar Junction Transistor, transistor configurations, bipolar junction transistor (CE configuration) as switch, Saturated and non-saturated logic, Integrated Circuits, characteristics of digital logic families, TTL, ECL, CMOS.	Dec, 2020	1. Assignments 2. Class tests 3. Presentation 4. Code- Practical
UNIT –II	Logic gates: AND, OR, NOT Gates and their Truth Tables, NOR, NAND & XOR gates, Boolean algebra, Basic Boolean Law's, Demorgan's theorem, Boolean function and their truth tables.	Feb, 2021	“
UNIT-III	MAP simplification: Minimization techniques, K-Map, Sum of Product & Product of Sum, Venn diagram. Combinational circuit.	March, 2021	“
UNIT-IV	Sequential circuits: Half adder & Full adder, BCD adder, Full Subtractor, Flip-flops-RS, D, JK, T & Master-Slave flip-flops, Shift registers, Multiplexer, Encoder, Decoder.	April, 2021	“

**Course Title:- Data Structure****Course Code:- BCA0204****Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Preliminaries: Concept & notation, common operation on data structures, algorithm complexity, time-space trade off between algorithm, physical & logical representation of different data structures. Arrays: Arrays defined, representing arrays in memory, Various operation (traversal, insertion, deletion), Multidimensional arrays, Sequential allocation, Address calculation	Dec, 2020	5. Assignments 6. Class tests 7. Presentation 8. Code- Practical
UNIT –II	Linked List: Definition, type (linear, circular, doubly linked, inverted), representing linked lists in memory, advantages of using linked list over arrays, various operations on Linked list (traversal, insertion, deletion)	Feb, 2021	“

UNIT-III	Stacks: Definition & concepts of stack structure, Implementation of stacks, Operation on stacks (push & pop), Application of stacks (converting arithmetic expression from infix notation to polish and their subsequent evaluation), quick sort technique to sort an array, recursion). Queue: Definition & concept of queues, implementation of queue, operation on queues (insert & delete), circular queue.	March, 2021	“
UNIT-IV	Trees Structures: Tree, Binary Trees, Tree Traversal Algorithms (Pre-Order, In-Order, Post-Order), Threaded Trees, Binary Search Trees. Sorting & Searching: Selection sort, Bubble sort, Merge sort, Radix sort, Quick sort, Sequential search, Linear search and their complexity.	April, 2021	“

**Course Title:- Data Structure lab-III**

**Course Code:- BCA0204(P)**

**Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	Arrays: Arrays defined, representing arrays in memory, Various operation (traversal, insertion, deletion), Multidimensional arrays, Sequential allocation, Address calculation	Dec, 2020
UNIT –II	Linked List: Definition, type (linear, circular, doubly linked, inverted), representing linked lists in memory, advantages of using linked list over arrays, various operations on Linked list (traversal, insertion, deletion)	Feb, 2021
UNIT-III	Stacks: Definition & concepts of stack structure, Implementation of stacks, Operation on stacks (push & pop), Application of stacks (converting arithmetic expression from infix notation to polish and their subsequent evaluation), quick sort technique to sort an array, recursion). Queue: Definition & concept of queues, implementation of queue, operation on queues (insert & delete), circular queue.	March, 2021
UNIT-IV	Trees Structures: Tree, Binary Trees, Tree Traversal Algorithms (Pre-Order, In-Order, Post-Order), Threaded Trees, Binary Search Trees. Sorting & Searching: Selection sort, Bubble sort, Merge sort, Radix sort, Quick sort, Sequential search, Linear search and their complexity.	April, 2021

**Course Title:- Database Management System**

**Course Code:- BCA0205**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Introduction To Database Concepts: Data Modeling for a Database, Fields, Records and Files, Abstraction and Data Integration, Database Architecture, Users, Structure of DBMS, Advantages and Disadvantages of DBMS. Data Models: Entity, Attribute, Relationship, Data Model Classifications, File based, Traditional, Semantic, Entity-Relationship Model.	Dec, 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	File Organization: Operation on files, Sequential Files, Index-Sequential Files, Types of Indexes, Implicit, limit, multilevel, Direct Files, Indexing using B-Tree Structure. Relational Model: Relational Database, Relational Algebra, Relational Calculus	Feb, 2021	“
UNIT-III	Relational Database Design: Relational Scheme and Relational Design, Functional Dependency, Normal forms (First, Second, Third, Boyce Code), Decomposition and dependency preservation, Multi-valued dependency.	March, 2021	“
UNIT-IV	Ms Access: Tables (Creation/Design structure, Data Entry), Primary keys, Foreign Keys Master-Detail Table, Query (Select, Make-Table, Update, Append, Delete) Form (Modal, Modeless), Relationships Report (Creation of a simple report from a table and from a query).	April, 2021	“

**Course Title:- Database Management System lab-IV**

**Course Code:- BCA0205(P)**

**Total Credits:- 3**

Units	Topics	Time /Duration
UNIT-I	, Ms Access: Tables (Creation/Design structure, Data Entry), Primary keys, Foreign Keys Master-Detail Table,	Dec, 2020
UNIT –II	Query (Select, Make-Table, Update, Append, Delete)	Feb, 2021
UNIT-III	Form (Modal, Modeless),	March, 2021

UNIT-IV	Relationships Report (Creation of a simple report from a table and from a query).	April, 2021
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**Class- BCA 4th Sem**

**Course Title: - Personnel Management**

**Course Code: – BCA0401**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Introduction to Personnel Management : Nature, Scope, functions and significance, Personnel Policies, classification and organization of Personnel Department.	Dec, 2020	1. Assignments 2. Class tests 3. Presentation 4. Code - Practical
UNIT –II	Human Resource Planning: Meaning, objectives and importance of HRM, Job Analysis and Design, Recruitment, selection, Terms of Employment, Induction and Briefing, Orientation and Placement.	Feb, 2021	“
UNIT-III	Human resources Development: Training and Development and Promotion and incentives, retirement benefits.	March, 2021	“
UNIT-IV	Performance Appraisal and Job Evaluation, Employee remuneration and various incentive plans.	April, 2021	“

**Course Title:- Accounting****Course Code:- BCA0402****Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Accounting : Meaning, Definition and objects of Accounting, Accounting Principles, Accounting concepts and Conventions, Principle of Double Entry System, Journal Entry, Ledger, Cash Book and Subsidiary books, Trial Balance and rectification of errors.	Dec, 2020	1. Assignments 2. Class tests 3. Presentation
UNIT –II	Final Account: Manufacturing Account, Trading Account, Profit and Loss Account and Balance Sheet.	Feb, 2021	“
UNIT-III	Cost Accounting: Nature and scope of Cost Accounting, Cost Concept and classification, Cost Sheet, Marginal Costing (BEP and Cost Volume Profit analysis).	March, 2021	“
UNIT-IV	Management Accounting: Meaning, importance and Scope of Management Accounting Brief introduction to the tools of financial statements, Analysis (Ratio, Fund Flow and Cash Flow Analysis).	April, 2021	“

**Course Title: - System Analysis and Design****Course Code: –BCA0403****Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	Overview of System Analysis and Design: Business System concepts, System development life cycle, Project Selection, Feasibility Analysis, Design, Limitation, testing and evaluation. Initial Investigation: Sources of Requests, User / Analyst interaction, Qualities of a System Analyst	Dec, 2020	4. Assignments 5. Class tests 6. Presentation 7. Code - Practical
UNIT –II	Feasibility studies: Technical, Operational, Behavioral and economic feasibilities, cost and benefit analysis.	Feb, 2021	“

UNIT-III	System requirement specification and analysis: Fact finding techniques, Data Flow Diagrams, Data Dictionaries, process organization and interaction, Decision Analysis, Decision Trees and Tables. Top down and bottom up variance, Audit trails.	March, 2021	“
UNIT-IV	Detail Design: Modularization, module specification, file design, system development involving databases. System control and quality assurance: Design objectives reliability and maintenance, software design and documentation tools, unit and integration testing, testing practice and plans, system control.	April, 2021	“

**Course Title:- Internet Technology & Web Page Design      Course Code:- BCA0404**  
**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Internet: Evolution of Internet, Internet Application, Network requirements, Bandwidth, Internet features (Electronic Mail, Newsgroups, FTP Archive, Real Time Activity, Video, Audio, Search Engine).	Dec, 2020	8. Assignments 9. Class tests 10. Presentation
UNIT –II	World Wide Web: Definition, WWW Browsers, WWW Servers, Dial-Up SLIP, PPP Access, Dedicated line, ISDN.TCP/IP Connectivity- DNS Servers, Domain Names Registration process, IP addressing, Routing with TCP/IP Basics	Feb, 2021	“
UNIT-III	HTML: Text formatting, Data, Tables, Table layout, Images, HTML Interactivity, URLs, HTTP, NNTP, Hyperlinks, Menus & Image Maps, HTML Form, Embedded objects in HTML, Web Typography, Approaching Web Typography, Graphics and Type, Families and Faces, Type forms, Color and Type, Adding Graphics, Adding Graphics with the Image Element, Using images as links, Creating Image Maps, Working with Image Files, Layout Technology, Standard HTML Formatting, Tables, Frames,	March, 2021	“
UNIT-IV	CSS: Formatting your site with Cascading Style Sheets, Seeing Style Sheets in Action, Understanding CSSI's Advantages and Limitations, Making HTML and CSSI's, Making HTML and CSSI work together, Learning How CSSI Works, Using CSSI Properties. XML, XML Language, SMGL, Linking in XML.	April, 2021	“

**Course Title:- Internet Technology & Web Page Design lab-VII      Course Code:- BCA0404(P)**  
**Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	HTML: Text formatting, Data, Tables, Table layout, Images, HTML Interactivity, URLs, HTTP, NNTP, Hyperlinks, Menus & Image Maps, HTML Form, Embedded objects in HTML, Web Typography, Approaching Web Typography,	Dec, 2020
UNIT –II	Graphics and Type, Families and Faces, Type forms, Color and Type, Adding Graphics, Adding Graphics with the Image Element, Using images as links, Creating Image Maps, Working with Image Files, Layout Technology, Standard HTML Formatting, Tables, Frames	Feb, 2021
UNIT-III	CSS: Formatting your site with Cascading Style Sheets, Seeing Style Sheets in Action, Understanding CSSI's Advantages and Limitations, Making HTML and CSSI's	March, 2021
UNIT-IV	,Making HTML and CSSI work together, Learning How CSSI Works, Using CSSI Properties. XML, XML Language, SMGL, Linking in XML.	April, 2021

**Course Title:- Programming in Visual Basic      Code:- BCA0405**  
**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
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UNIT-I	Introduction to Visual Studio: Features of Visual basic, Visual Basic applications, compile, run, Difference between Visual Basic and .NET languages. Open, close existing project, possible menu variations, use the Form Designer, Code Editor, Solution Explorer, work with Visual Studio's windows. Design a form: Add controls to a form, Set properties, common properties for forms and controls, add navigation features, property settings, use Document Outline view, name and save files of a project, Design and property settings for the form, Refer to properties, methods, events, Add code to a form, create an event handler for the default event of a form or control, code with a readable style, code comments, detect and correct syntax errors. Use the toolbar buttons, collapse or expand code, print source code, code snippets, Smart Compile Auto Correction feature, My feature and debug a project.	Dec, 2020	<ol style="list-style-type: none"> <li>1. Assignments</li> <li>2. Class tests</li> <li>3. Presentation</li> </ol>
UNIT –II	Work with numeric and string data: Work with the built-in value types- Declare and initialize variables, declare and initialize constants, code arithmetic expressions, code assignment statements, work with the order of precedence, use casting, change the type semantics, work with strings, declare and initialize a string, join and append strings. Data types, use Visual Basic functions to convert data types, use methods to convert data types, formatting functions, use methods to convert numbers to formatted strings, Code control structures: Code Boolean expressions, relational operators, logical operators, conditional statements, If statements, Select Case statements, loops, For loops, Do loops, use Exit and Continue statements, Debugging techniques for programs with loops.	Feb, 2021	“
UNIT-III	Code procedures and event handlers: Code and call procedures- Sub procedures, call Sub procedures, pass arguments by reference and by value, code and call Function procedures, work with events, start an event handler for any event, handle multiple events with one event handler, use the Code Editor to start an event handler, add and remove event writing. The Function procedure, event handlers, Message box Handle exceptions and validate data: Introduction to data validation and exception handling, use the IsNumeric function, display a dialog box for error messages, exception handling works, Use structured 34 exception handling, catch an exception, properties and methods of an exception, throw an exception, application with exception handling. Validate data: Validate a single entry, use generic procedures to validate an entry, validate multiple entries, application with data validation, dialog boxes, code, Difference between Validating event and masked text box.	March, 2021	“
UNIT-IV	Arrays and collections: one-dimensional arrays, create an array, assign values to the elements of an array, use For loops to work with arrays, use For Each loops to work with arrays, work with rectangular arrays, create a rectangular array, assign values to a rectangular array, work with rectangular arrays, create a jagged array, assign values to a jagged array, work with jagged arrays, use the Array class, refer to and copy arrays, code procedures that work with arrays, Work with list, sorted list, queues, stacks, array list. Dates and strings: create a DateTime value, get the current date & time, format DateTime values, perform operations on dates and times, work with strings, procedures for validating user entries, Format numbers, dates, and times, Format numbers. Types of controls, combo boxes, list boxes, check boxes, radio buttons, group boxes, use Tab Order view to set the tab order. Multi0form projects: Add a form to a project, rename a form, change the startup form for a project, display a form as a dialog box, pass data between a form and a custom dialog box, Use the MessageBox0	April, 2021	“

Display a dialog box and get the user response, use the FormClosing event. Debug an application: set the debugging options, break mode, use the Edit Continue feature, breakpoints, debugging windows, Locals window to monitor variables, use the Autos window to monitor variables, Watch windows to monitor expressions, Call Stack window to monitor called procedures, Output window to get build or debugging information. Markup0Only User Control, Custom properties, handling events and loading user controls dynamically.		
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**Course Title:- Programming in Visual Basic lab-VIII      Code:- BCA0405(P)**

**Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	use the Form Designer, Code Editor, Solution Explorer, work with Visual Studio's windows. Design a form: Add controls to a form, Set properties, common properties for forms and controls, add navigation features, property settings, use Document Outline view, name and save files of a project, Design and property settings for the form, Refer to properties, methods, events, Add code to a form, create an event handler for the default event of a form or control, code with a readable style, code comments, detect and correct syntax errors. Use the toolbar buttons, collapse or expand code, print source code, code snippets, Smart Compile Auto Correction feature, My feature and debug a project.	Dec, 2020
UNIT –II	Work with numeric and string data: Work with the built-in value types- Declare and initialize variables, declare and initialize constants, code arithmetic expressions, code assignment statements, work with the order of precedence, use casting, change the type semantics, work with strings, declare and initialize a string, join and append strings. Data types, use Visual Basic functions to convert data types, use methods to convert data types, formatting functions, use methods to convert numbers to formatted strings, Code control structures: Code Boolean expressions, relational operators, logical operators, conditional statements, If statements, Select Case statements, loops, For loops, Do loops, use Exit and Continue statements, Debugging techniques for programs with loops.	Feb, 2021
UNIT-III	Code procedures and event handlers: Code and call procedures- Sub procedures, call Sub procedures, pass arguments by reference and by value, code and call Function procedures, work with events, start an event handler for any event, handle multiple events with one event handler, use the Code Editor to start an event handler, add and remove event writing. The Function procedure, event handlers, Message box Handle exceptions and validate data: Introduction to data validation and exception handling, use the IsNumeric function, display a dialog box for error messages, exception handling works, Use structured 34 exception handling, catch an exception, properties and methods of an exception, throw an exception, application with exception handling. Validate data: Validate a single entry, use generic procedures to validate an entry, validate multiple entries, application with data validation, dialog boxes, code, Difference between Validating event and masked text box.	March, 2021

UNIT-IV	<p>Arrays and collections: one-dimensional arrays, create an array, assign values to the elements of an array, use For loops to work with arrays, use For Each loops to work with arrays, work with rectangular arrays, create a rectangular array, assign values to a rectangular array, work with rectangular arrays, create a jagged array, assign values to a jagged array, work with jagged arrays, use the Array class, refer to and copy arrays, code procedures that work with arrays, Work with list, sorted list, queues, stacks, array list. Dates and strings: create a DateTime value, get the current date &amp; time, format DateTime values, perform operations on dates and times, work with strings, procedures for validating user entries, Format numbers, dates, and times, Format numbers. Types of controls, combo boxes, list boxes, check boxes, radio buttons, group boxes, use Tab Order view to set the tab order. Multi0form projects: Add a form to a project, rename a form, change the startup form for a project, display a form as a dialog box, pass data between a form and a custom dialog box, Use the MessageBox0 Display a dialog box and get the user response, use the FormClosing event. Debug an application: set the debugging options, break mode, use the Edit Continue feature, breakpoints, debugging windows, Locals window to monitor variables, use the Autos window to monitor variables, Watch windows to monitor expressions, Call Stack window to monitor called procedures, Output window to get build or debugging information.</p> <p>Markup0Only User Control, Custom properties, handling events and loading user controls dynamically.</p>	April, 2021

**Class- BCA 6<sup>th</sup> Sem**

**Course Title: - Computer Networks**

**Course Code: – BCA0601**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>
UNIT-I	<p>Introduction to Communication Network: Computer Networks, (Need, uses, and Advantages of Computer Network), Network Models (Peer0to0Peer0Network, Server0based Network, Client0Server Network), Network components, Network Topology (Star, Ring, Bus, Mesh, Tree, Hybrid, Advantage and Disadvantage of each types.), Types of Networks (LAN, MAN, WAN), Internet (Brief History, Internet Today, Protocol and Standard</p>	Dec, 2020	<ol style="list-style-type: none"> <li>1. Assignments</li> <li>2. Class tests</li> <li>3. Presentation</li> <li>4. Code - Practical</li> </ol>

UNIT –II	Error Detection and Correction: Types of errors (Single-bit error, Burst error), Error Detection (Redundancy, Parity check, CRC, Checksum), Error correction (FEC, Hamming code, Burst error corrections) Data Communication Channel and Media, Conductive Media (Twisted-pair cable, Coaxial cable), Fiber optics (Characteristic of light, Types of Fiber optics), Wireless Transmission, (Microwaves, Infrared, Radio waves)..	Feb, 2021	“
UNIT-III	OSI Reference Model: OSI Model, OSI Physical Layer Concepts, DLL, Network Layer, TL, SL, PL and AL Concepts. Internet model / TCP/IP Model and Protocols, Modem, DSL, Cable Modem, ISDN, Real world network (Ethernet, Ethernet operation, frame format, Ethernet characteristic, cabling and components) Token Ring and Token Bus networking Technology. Network Connectivity, Repeater, Hub-(Active, Passive and Intelligent), Bridge (Local, Remote and wireless), Routers (Static and Dynamic), switches and types of switches, Brouter and Gateways.	March, 2021	“
UNIT-IV	TCP/IP Protocol: Protocol Suite, Internet Architecture Board, TCP/IP Protocol (TCP, UDP, IP, ARP), concept of Physical Addressing, and logical Addressing, Different Classes of IP addressing, Special IP Addressing, Classful Addressing, Sub netting, Super netting, Classless addressing, TCP/IP Service Protocol (FTP, SMTP, TELNET, DNS).	April, 2021	“

**COURSE NAME – NUMERICAL METHODS**

**COURSE CODE: BCA0602**

**Credits: 4**

Unit	Topic	Months	activity
NUMERICAL ANALYSIS	<ol style="list-style-type: none"> <li><b>Representation of numbers:</b> Decimal to Binary conversion, Floating point representation of numbers, Integer and real/floating point arithmetic,</li> <li><b>Errors:</b> different types of errors, error in the approximation of a function, error in series approximation.</li> </ol>	Dec, 2020	assignment Class test
Linear equations	<ol style="list-style-type: none"> <li>Solution of algebraic and transcendental equation using Bisection method, Regula-Falsi method, Newton-Raphson method.</li> </ol>		assignment Class test

	2. Solution of simultaneous linear equations using Gauss Elimination method, Gauss-Jordon method, Jacobi's iterative method, Gauss Seidel iterative method	Feb, 2021	
Interpolation	1. Interpolation, Finite difference and operators 2. Newton Forward, Newton Backward, Gauss forward, Gauss backward.	March, 2021	assignment Class test
Numerical differentiation and integration	1. <b>Numerical differentiation:</b> Differentiating a Graphical function, Differentiating a Tabulated function- Equal and Un-equal intervals. 2. <b>Numerical integration:</b> Newton-Cotes formula, Trapezoidal rule, Simpson's 1/3rd and 3/8th rule, Weddle's rule.	April, 2021	assignment Class test

**Course Title: - Multimedia Technology**

**Course Code: – BCA0603**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Introduction to Multimedia : Needs and areas of use, Development platforms for multimedia, Identifying Multimedia elements Text, Images, Sound, Animation and Video, Making simple Multimedia with PowerPoint. Concepts of plain & formatted text, RTF & HTML texts, Object Linking and Embedding concept.	Dec, 2020	1. Assignments 2. Class tests 3. Presentation 4. Code - Practical
	Sound: Sound and its Attributes, Mono V/S Stereo Sound, Sound Channels, Sound and its Effect In Multimedia, Analog V/S Digital Sound, Overview Of Various Sound File Formats On PC WAV, MP3.		“

UNIT –II		Feb, 2021	
UNIT-III	Graphics: Importance of Graphics in Multimedia, Vector and Raster Graphics, Image Capturing Methods Scanner, Digital Camera Etc. Various Attributes of Images Size, Color, Depth , Resolution etc, Various Image File Format BMP, DIB, EPS, PIC, and TIF Format Their Features and imitations, Basics of animation, Software Tools for animation.	March, 2021	“
UNIT-IV	Video: Basics of Video Analog and Digital Video, How to use video on PC. Introduction to graphics accelerator cards, Brief note on various video standards NTSC, HDTV, Introduction to video capturing Media & instrument Videodisk. Virtual Reality Terminology Head Mounts Display (HMD), Boom, Cave, Input Devices and Sensual Technology	April, 2021	“

**Course Title: - Computer Graphics**

**Course Code: – BCA0604**

**Total Credits:- 4**

Units	Topics	Time /Duration	Activities
UNIT-I	Introduction: Definition Of Computer Graphics And Its Applications, Video Display Devices, Raster Scan Displays, Random Scan Displays, Color CRT Monitors, Direct View Storage Tubes, Flat Panel Displays. Input Devices: Keyboard, Mouse, Trackball and Spaceball, Joysticks, Digitizers, Image Scanners, Touch Panels, Light Pens, Voice Systems	Dec, 2020	1. Assignments 2. Class tests 3. Presentation 4. Code - Practical
UNIT –II	Output Primitives: Line Drawing Algorithms (DDA, Bresenham's ), Circle Generating Algorithm(Midpoint Circle Drawing Algorithm), Ellipse Generating Algorithm, Midpoint Ellipse Generating Algorithm, Character Generation.	Feb, 2021	“
UNIT-III	2D Transformations: Translation, Rotation, Scaling, Reflection, Shear, Composite Transformation0Translation, Rotations, Scaling. Two Dimensional Viewing: Window-To-Viewport Coordinate Transformation	March, 2021	“
UNIT-IV	Clipping: Introduction, Clipping Operations, Point Clipping, Line Clipping(Cohen-Sutherland Line Clipping, Liang-Barsky Line Clipping, Nicholl-Lee-Nicholl Line Clipping), Polygon Clipping(SutherlandHodgeman Polygon Clipping, Weiler-Atherton Polygon Clipping), Curve Clipping, Text Clipping.	April, 2021	“

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**Course Title: - Computer Graphics lab-XI**

**Course Code: – BCA0604 (P)**

**Total Credits:- 3**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>
UNIT-I	Output Primitives: Line Drawing Algorithms (DDA, Bresenham's ), Circle Generating Algorithm(Midpoint Circle Drawing Algorithm),	Dec, 2020
UNIT –II	Ellipse Generating Algorithm, Midpoint Ellipse Generating Algorithm, Character Generation.	Feb, 2021
UNIT-III	2D Transformations: Translation, Rotation, Scaling, Reflection, Shear, Composite Transformation0Translation, Rotations, Scaling. Two Dimensional Viewing: Window-To-Viewport Coordinate Transformation	March, 2021
UNIT-IV	Clipping: Clipping Operations, Point Clipping, Line Clipping(Cohen-Sutherland Line Clipping, Liang-Barsky Line Clipping, Nicholl-Lee-Nicholl Line Clipping), Polygon Clipping(SutherlandHodgeman Polygon Clipping, Weiler-Atherton Polygon Clipping), Curve Clipping, Text Clipping.	April, 2021

**Course Title: Software Engineering**

**Course Code: – BCA0605**

**Total Credits:- 4**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>

UNIT-I	Software engineering: Evolving Role of Software, Software Engineering, Changing nature of Software, Software Myths, Terminologies, Role of management in software development Software Process and desired Characteristics. Software Life Cycle Models: Build & Fix Model, Water Fall Model, Incremental Process Model, Evolutionary Process Models, Unified Process, Comparison of Models, Other Software Processes, Selection of a Model.	Dec, 2020	<ol style="list-style-type: none"> <li>1. Assignments</li> <li>2. Class tests</li> <li>3. Presentation</li> <li>4. Code - Practical</li> </ol>
UNIT –II	Software Requirements Analysis & Specifications: Requirements Engineering, Types of Requirements, Feasibility Studies, Requirements Elicitation, Requirements Analysis Documentation, Validation and Management. Software Architecture: Its Role, Views, Component & Connector View and its architecture style, Architecture Vs Design, Deployment View & Performance Analysis, Documentation, Evaluation	Feb, 2021	“
UNIT-III	Function Oriented Design: Design principles, Module level Concepts, Notation & Specification, Structured Design Methodology, Verification Object Oriented Design: OO Analysis & Design, OO Concepts, Design Concepts, UML – Class Diagram, Sequence & Collaboration Diagram, Other diagrams & Capabilities, Design Methodology , Dynamic and Functional Modeling, Internal Classes & Operations.	March, 2021	“
UNIT-IV	Detailed Design: PDL, Logic/Algorithm Design, State Modeling of Classes, Verification: Design Walkthroughs, Critical Design Review, Consistency Checkers. Coding: Programming Principles & Guidelines, Coding Process, Refactoring, Verification.	April, 2021	“



**Lesson plan for the session 2020-21**  
**Department of computer Science and Technology**  
**Class- Add-on Diploma B.A/B.Com/B.Sc**  
**Course Title: -Internet Technology and Web Page Designing Course Code: –UG-201**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>	<b>Remarks</b>
UNIT-I	Internet: Evolution of Internet, Internet Application, Network requirements, Bandwidth	July	1. Assignments 2. Class tests 3. Presentation	
UNIT-I	Internet features (Electronic Mail, Newsgroups, FTP Archive, Real Time Activity, Video, Audio, and Search Engine).	August	“	
UNIT –II	World Wide Web: Definition, WWW Browsers, WWW Servers, Dial-Up SLIP, PPP Access, Dedicated line, ISDN.TCP/IP Connectivity- DNS Servers,	September	“	
UNIT –II	Domain Names Registration process, IP addressing, Routing with TCP/IP Basics	October	“	
UNIT-III	HTML: Text formatting, Data, Tables, Table layout, Images, HTML Interactivity, URLs, HTTP, NNTP, Hyperlinks, Menus & Image Maps, HTML Form, Embedded objects in HTML, Web Typography, Approaching		“	
UNIT-III	Web Typography, Graphics and Type, Families and Faces, Type forms, Color and Type, Adding Graphics, Adding Graphics with the Image Element, Using images as links, Creating Image Maps, Working with Image Files, Layout Technology, Standard HTML Formatting, Tables, Frames,		“	
UNIT-IV	CSS: Formatting your site with Cascading Style Sheets, Seeing Style Sheets in Action, Understanding CSSI's Advantages and Limitations, Making HTML and CSSI's,		“	
UNIT-IV	Making HTML and CSSI work together, Learning How CSSI Works, Using CSSI Properties. XML, XML Language, SMGL, Linking in XML.		“	

**Lesson plan for the session 2020-2021**  
**Department of computer Science and Technology**  
**Class- Add-on Advance Diploma B.A/B.Com/B.Sc**  
**Course Title:- Internet Technology and Web Page Designing      Course Code:- UG-301**

<b>Units</b>	<b>Topics</b>	<b>Time /Duration</b>	<b>Activities</b>	<b>Remarks</b>
UNIT-I	Introduction To Database Concepts: Data Modeling for a Database, Fields, Records and Files, Abstraction and Data Integration, Database Architecture, Users, Structure of DBMS, Advantages and Disadvantages of DBMS.	July	4. Assignments 5. Class tests 6. Presentation	
UNIT-I	Data Models: Entity, Attribute, Relationship, Data Model Classifications, File based, Traditional, Semantic, Entity-Relationship Model.	August	“	
UNIT –II	File Organization: Operation on files, Sequential Files, Index Sequential Files, Types of Indexes, Implicit, limit, multilevel, Direct Files, and Indexing using B-Tree Structure.	September	“	
UNIT –II	Relational Model: Relational Database, Relational Algebra, Relational Calculus.	October	“	
UNIT-III	Relational Database Design: Relational Scheme and Relational Design, Functional Dependency,	November	“	
UNIT-III	Boyce Code), Decomposition and dependency preservation, Multi-valued dependency.	December	“	
UNIT-IV	Ms Access: Tables (Creation/Design structure, Data Entry), Primary keys, Foreign Keys Master-Detail Table, Query (Select, Make-Table,	February	“	
UNIT-IV	Update, Append, Delete) Form (Modal, Modeless), Relationships Report (Creation of a simple report from a table and from a query).	March	“	