# ACADEMIC CALENDER (2019-2020)

# **Department of Chemistry**

# $\frac{3^{rd}\ year\ (Honours)\ (1+1+1\ system)}{(Paper\ V)}$

July '19 to Octob	er '19		November' 19 t	o Januar	·y' 20	February'	20 to April'2	20
Topic	No.	Faculty	Topic	No of	Faculty	Topic	No. of	Faculty
	of			Lect.			Lect.	
	Lect.							
CHT 31a			CHT 31c					
Unit I Chemistry of coordination compounds	12	AP	Unit I Electrochemica I and spectral analysis, and analytical separation	8	SS			
CHT 31a			CHT 31c					
Unit II Chemistry of dand f- block elements	10	SS	Unit II Statistical methods in chemical analysis and environmental analysis	6	AP			
CHT 31b  Unit I Organometallic Compounds	8	SS	CHT 31d  Unit I Gravimetric and tritimetric methods of analysis	6	SS			
CHT 31b <u>Unit II</u> Bioinorganic Chemistry	10	AP	CHT 31d Unit II Thermodynami -cs of dissolution	6	AP			

# $\frac{3^{rd}\ year\ (Honours)}{(Paper\ VI)}$

July '19 to Octob	er '19		November' 19 t	o Januai	·y' 20	February'2	20 to April'2	0
Topic	No.	Faculty	Topic	No.	Faculty	Topic	Lect	Faculty
	of			of				
	Lect.			Lect.				
CHT 32a			CHT 32c					
Unit I Carbanion chemistry and cyclic stereochemistry	6	GM	Unit I Carbocycles and Heterocycles	8	GM			
CHT 32a			CHT 32c					
Unit II Spectroscopy UV, IR, NMR (elementary)	8	GM	Unit II Amino acids, peptides and nucleic acids	6	GM			
CHT 32b  Unit I Synthetic strategies and Asymmetric synthesis	8	GM	CHP 34a Spectroscopic Analysis of Organic Compounds	10	GM			
CHT 32b								
Unit II Carbohydrate chemistry	6	GM						

# $\frac{3^{rd}\ year\ (Honours)}{(Paper\ VII)}$

July '19 to Octobe	er '19		November' 19 to	y' 20	February'20 to April'20			
Topic	Lect	Faculty	Topic	Lect	Faculty	Topic	Lect	Faculty
CHT 33a		_	CHT 33c					-
Unit I Properties of solids, interfaces and dielectrics	6	AD	Unit I Kinetics and photochemistry	8	AD			
CHT 33a			CHT 33c					
<u>Unit II</u> Quantum Chemistry – II	8	AD	Unit II Spectroscopy	6	AD			
CHT 33b  Unit I  Phase equilibrium and colligative properties	8	AD	CHP 35a  Experiments (Practical)	24	AD			
Unit II Statistical thermodynamics and the third law	6	AD						

# $\frac{3^{rd} \ year \ (Honours)}{(Paper \ VIII)}$

July '19 to Octobe	July '19 to October '19			November' 19 to January' 20				February'20 to April'20		
Topic	Lect	Faculty	Topic	Lect	Faculty	Topic	Lect	Faculty		
CHT 34b			CHT 34b							
Experiment-1 (Practical)	18	GM	Experiment-2 (Practical)	24	GM					
CHT 35b  Experiment-I (Practical)	24	AD	CHT 35b  Experiment-2 (Practical)	18	AD					

#### 3rd year (General)

#### Paper IVA

July '19	to October ' 19	)	November' 19 to January'20					
Topic	No. of	Faculty	Topic	No. of	Faculty			
	Lectures			Lectures				
CGT31a			CGT31b					
Unit I Chemical Analysis	6	SEM	Unit II Industrial chemistry II	6	SEM			
CGT31a			CGT31c					
Unit II Error analysis and computer applications	8	SEM	Unit I Environmental Chemistry	8	SEM			
CGT31b  Unit I	6	SEM	CGT31c  Unit II	6	SEM			
Industrial chemistry I			Industrial chemistry III					

#### Paper IVB

July '19	9 to October ' 19		November' 19 to January'20				
Topic	No. of Lectures Faculty		Topic	No. of Lectures	Faculty		
Practical	16	SEM	Practical	16	SEM		
Practical	8	AD	Practical	6	AD		

#### Academic Calendar CBCS system (July, 2019- Dec, 2019)

#### SEMESTER-1(HONOURS)

	July '19 to Septem	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty
Code/		Lect		Code/		of	
Paper				Paper		Lect	
	Extra nuclear Structure of atom	14	SS		Redox Reactions	14	AP
	Acid-Base reactions	12	AP		<b>General Treatment</b>	16	GM
					of Reaction		
CC-1				CC-1	Mechanism I		
	<b>Bonding and Physical</b>	18	GM		INORGANIC	15	AP
	Properties				CHEMISTRY		
					PRACTICAL		
	INORGANIC	15	SS		ORGANIC	24	GM
	CHEMISTRY				CHEMISTRY		
	PRACTICAL				PRACTICAL		
	ORGANIC	30	GM				
	CHEMISTRY						
	PRACTICAL						

## SEMESTER-1(HONOURS)

	July '19 to Septeml	ber '19	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
	Stereochemistry -I	8	GM		Stereochemistry - I	9	GM	
CC-2	General Treatment of Reaction Mechanism II	3	GM	CC-2	Transport processes	02	AD	
	Kinetic Theory and Gaseous state	20	AD			15	AD	
	ORGANIC CHEMISTRY PRACTICAL	15	GM		ORGANIC CHEMISTRY PRACTICAL	7	GM	
	PHYSICAL CHEMISTRY PRACTICAL	8	AD		PHYSICAL CHEMISTRY PRACTICAL		AD	

## SEMESTER-1(GENERAL)

	July '19 to Septem	ber '19		October'19 to December' 19					
Course Code/ Paper	Topic	No. of Lect	Faculty	Course Code/ Paper	Topic	No. of Lect	Faculty		
	Kinetic Theory of Gases and Real gases	8	AD		Chemical Periodicity	8	SM		
	Liquids	4	SM		Acids and bases	6	GM		
GE-1	<b>Atomic Structure</b>	8	SM	GE-1	Chemical Kinetics	8	AD		
	Fundamentals of Organic Chemistry	8	GM		Nucleophilic Substitution and Elimination Reactions	6	GM		
	Stereochemistry	6	GM		Stereochemistry	10	GM		
	Practical	12	SM		Practical	12	SM		
	Practical	12	AP		Practical	12	AP		

# SEMESTER-3 (HONOURS)

	July '19 to Septem	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty
Code/	_	Lect		Code/		of	
Paper				Paper		Lect	
	Chemical	10	AD		Applications of	06	AD
	Thermodynamics-				Thermodynamics		
	I				- I		
CC-5	Chemical	20	AD	CC-5	Electrochemistry	24	AD
CC-3	Thermodynamics			CC-3			
	II						
	PHYSICAL	24	AD		PHYSICAL	21	AD
	CHEMISTRY				CHEMISTRY		
	PRACTICAL				PRACTICAL		

	July '19 to Septem	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty
Code/		Lect		Code/		of	
Paper				Paper		Lect	
	Chemical	15	AP		Coordination	15	AP
	periodicity				Chemistry-I		
	Chemistry of s and	15	SS		Chemistry of s	15	SS
CC-6	p Block Elements			CC-6	and p Block		
CC-0				CC-0	Elements		
	INORGANIC	27	AP		INORGANIC	18	SS
	CHEMISTRY				CHEMISTRY		
	PRACTICAL				PRACTICAL		

	July '19 to Septeml	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty
Code/		Lect		Code/		of	
Paper				Paper		Lect	
	Chemistry of	20	GM		Carbonyl and	30	GM
	alkenes and alkynes				Related		
					Compounds		
CC-7	Aromatic	20	GM	CC-7	Organometallics	10	GM
	Substitution						
	ORGANIC	45	GM		ORGANIC	30	GM
	CHEMISTRY				CHEMISTRY		
	PRACTICAL				PRACTICAL		

	July '19 to September '19				October'19 to December' 19			
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
	ANALYTICAL				ANALYTICAL			
SECA	CLINICAL BIOCHEMISTRY	20	GM	SECA	CLINICAL BIOCHEMISTRY	20	GM	

## SEMESTER-3(GENERAL)

	July '19 to September '19				October'19 to December' 19			
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/	_	Lect.		Code/		of		
Paper				Paper		Lect.		
	<b>Chemical Bonding</b>	8	SS		Transition	6	SS	
	and Molecular				Elements (3d			
	Structure				series)			
~- 4	Comparative study	8	AP		Coordination	8	AP	
GE-3	of p-block			GE-3	Chemistry			
	elements:				,			
	Ionic Equilibria	6	AD		Electrochemistry	10	AD	
	Conductance	6	AD		Aryl Halides	6	GM	
	Aromatic	6	GM		Organometallic	6	GM	
	Hydrocarbons				Compounds			
	Practical	24	SS		Practical	21	SS	

#### Academic Calendar CBCS system (January, 2020- Dec, 2020)

#### SEMESTER-2 (HONOURS)

Jan '20 to Mar '20				Apr'20 to Jun' 20				
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/	_	Lect		Code/		of		
Paper				Paper		Lect		
	Stereochemistry -II	20	GM		Substitution and Elimination Reaction	20	GM	
CC-3	General Treatment of Reaction Mechanism- III	10	GM	CC-3	General Treatment of Reaction Mechanism III	10	GM	
	ORGANIC CHEMISTRY PRACTICAL	27	GM		ORGANIC CHEMISTRY PRACTICAL	18	GM	

	Jan '20 to Mar '20				Apr'20 to Jun' 20			
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
	<b>Chemical Bonding</b>	20	SS		Chemical	15	AP	
	-I				<b>Bonding -II</b>			
	<b>Chemical Bonding</b>	15	AP		Radioactivity	10	SS	
CC-4	-II			CC-4				
CC-4	INORGANIC	27	SS	CC- <b>4</b>	INORGANIC	18	SS	
	CHEMISTRY				CHEMISTRY			
	PRACTICAL				PRACTICAL			

# SEMESTER-2(GENERAL)

	July '19 to Septem	October'19 to December' 19					
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty
Code/	_	Lect		Code/	_	of	
Paper				Paper		Lect	
	Chemical	15	AD		Chemical	8	AP
	Thermodynamics				Periodicity		
	Solutions	10	AD		Phase Equilibria	5	AD
	Solids	8	AD		Aliphatic	8	GM
GE-2				GE-1	Hydrocarbon		
	Error Analysis and	5	AD		Error Analysis	5	AD
	Computer				and Computer		
	Applications				Applications		
	Practical		AP		Practical	12	AP

# SEMESTER-4(HONOURS)

	Jan '20 to Mar '20				Apr'20 to Jun' 20			
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
	Nitrogen	12	GM		The Logic of	14	GM	
	Compounds				Organic synthesis			
	Rearrangements	14	GM		Organic	20	GM	
CC-8				CC-8	Spectroscopy			
CC-8	ORGANIC	27	GM	CC-0	ORGANIC	18	GM	
	CHEMISTRY				CHEMISTRY			
	PRACTICAL				PRACTICAL			

Jan '20 to Mar '20				Apr'20 to Jun' 20				
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
CC-9	Application of Thermodynamics- II Foundation of Quantum Mechanics PHYSICAL CHEMISTRY	20 15 27	AD AD	CC-9	Foundation of Quantum Mechanics Crystal structure  PHYSICAL CHEMISTRY	10 15 18	AD AD	
	PRACTICAL				PRACTICAL			

	Jan '20 to Mar '20				Apr'20 to Jun' 20				
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty		
Code/		Lect		Code/		of			
Paper				Paper		Lect			
	Coordination	30	AP		Coordination	15	AP		
	Chemistry-II				Chemistry-II				
	Chemistry of d-	15	SS		<b>Reaction Kinetics</b>	10	SS		
CC-10	and f- block			CC-10	and Mechanism				
CC-10	elements			CC-10					
	INORGANIC	27	SS		INORGANIC	18	SS		
	CHEMISTRY				CHEMISTRY				
	PRACTICAL				PRACTICAL				

# SEMESTER-4(GENERAL)

Jan '20 to Mar '20					Apr'20 to Jun' 20			
Course	Topic	No. of	Faculty	Course	Topic	No.	Faculty	
Code/		Lect		Code/		of		
Paper				Paper		Lect		
	Alcohol, Phenol and Ethers	15	GM		Amino acids and Carbohydrates	8	GM	
	Carbonyl Compounds	10	GM	]	Crystal Field Theory	5	AP	
GE-4	Carboxylic Acids and Their Derivatives	8	GM	GE-1	Quantum Chemistry and Spectroscory	10	AD	
	Amines and Diazonium salts	5	GM					
	Practical	27	AP		Practical	18	AP	