

GOVT. COLLEGE FOR WOMEN, BADHRA

(Affiliated to Ch. Bansi Lal University, Bhiwani, AISHE Code: C-51945) Address: Dhigawa Road, Badhra, Ch. Dadri, Haryana, PIN: 127308 Tel.: 01252-253036, E-Mail: gcwbadhra@gmail.com. Website http://www.gcwbadhra.ac.in



NOTICE

All the Teaching Staff Members are requested to submit their lesson plans for even semested 2023-24 latest by 31 January 2024 up to 2:00 pm so that it can be uploaded at portal. It may be treated as most urgent.

Principalge for Women Govt.Collage For Women

Badhra (Ch. Dadri)

कक्षा : प्रथम वर्ष (द्वितीय सत्र)अनुवाद

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : कमलेश ,सहायक प्रोफेसर, हिन्दी

क्रम	महीना	प्रकरण	शैक्षणिक	टिप्पणी
सं.			गतिविधियाॅ	
1	फरवरी	अनुवाद का अर्थ, परिभाषा,		
	सप्ताह प्रथम	स्वरूप		
		अनुवाद की विशेषताएँ		
		अनुवाद की प्रकृति एवं प्रक्रिया		
2	सप्ताह द्वितीय	अनुवाद के प्रकार		
		शब्दानुवाद, भावानुवाद, छायावाद,		
		सारानुवाद		
3	सप्ताह तृतीय	अनुवाद के सिद्धांत		
		अनुवाद का महत्व		
4	सप्ताह चतुर्थ	पद्यानुवाद अथवा काव्यानुवाद		
		से क्या अभिप्राय है?		
		पद्यानुवाद (काव्यानुवाद)की		
		विशेषताएँ		
		पद्यानुवाद (काव्यानुवाद) की		
		समस्याएं		

5	मार्च	गद्यानुवाद(कथानुवाद) से क्या		
	सप्ताह प्रथम	तात्पर्य है?		
		गद्यानुवाद की समस्याए		
		विज्ञान संबंधी अनुवाद		
6	सप्ताह द्वितीय	वाणिज्यिक अनुवाद की	असाइनमेंट- 1	
		अवधारणा		
		वाणिज्यिक अनुवाद की		
		समस्याएं		
7	सप्ताह तृतीय	वैज्ञानिक शब्दावली का अनुवाद	टैस्ट - 1	
		मुहावरों का अनुवाद		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	लोकोक्तियों का अनुवाद		
	सप्ताह प्रथम	भारत में अनुवाद प्रशिक्षण के		
		प्रमुख केंद्र		
10	सप्ताह द्वितीय	बैंको में प्रयुक्त होने वाली		
		पारिभाषिक शब्दावली के अंग्रेजी		
		रूप और हिन्दी रूप		
11	सप्ताह तृतीय	रेल्वे में प्रयुक्त होने वाली	असाइनमेंट -	
		पारिभाषिक शब्दावली के अंग्रेजी	Ш	
		रूप और हिन्दी रूप		

12	सप्ताह चतुर्थ	कार्यालयों में प्रयुक्त होने वाली	टैस्ट - II	
		पारिभाषिक शब्दावली के अंग्रेजी		
		रूप और हिन्दी रूप , प्रशासन		
		में प्रयुक्त होने वाली पारिभाषिक		
		शब्दावली के अंग्रेजी और हिन्दी		
		रूप		
13	मई	पुनरावृति		
	सप्ताह प्रथम			
14	सप्ताह द्वितीय	पुनरावृति		

कक्षा: तृतीय वर्ष (छठा सेमेस्टर)

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : कमलेश,सहायक प्रोफेसर, हिन्दी

Sr.	महीना	प्रकरण	शैक्षणिक	विवरण
No.			गतिविधियाॅ	
1	फरवरी	सम्प्रेषण की अवधारणा और		
	सप्ताह प्रथम	महत्व		
		सम्प्रेषण की प्रक्रिया		
2	सप्ताह द्वितीय	सम्प्रेषण के विभिन्न मॉडल		
		अभाषिक सम्प्रेषण		
3	सप्ताह तृतीय	मौखिक और लिखित सम्प्रेषण		
		वैयक्तिक, सामाजिक, व्यवसायिक		
		सम्प्रेषण		
4	सप्ताह चतुर्थ	भ्रामक सम्प्रेषण और प्रभावी		
		सम्प्रेषण में अन्तर		
		सम्प्रेषण में चुनौतियाँ		
		एवंसंभवनाएं		
5	मार्च	एकालाप और संलाप		
	सप्ताह प्रथम	संवाद		
6	सप्ताह द्वितीय	सामुहिकचर्चा	असाइनमेंट- 1	

7	सप्ताह तृतीय	मशीनी माध्यम : ई-मेल, सोशल	टैस्ट- 1	
		मीड़िया, एस . एम . एस .		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	इंटरनेट, फीडबैक, मौखिक और		
	सप्ताह प्रथम	लिखित सम्प्रेषण		
10	सप्ताह द्वितीय	बोलना : भाषण, वॉयस ओवर,		
		वाद-विवाद		
		लिखना : पत्र लेखन, अनुच्छेद		
		लेखन, पल्लवन, संक्षेपण		
11	सप्ताह तृतीय	पढ़ना : कविता पठन, नाट्यांश	असाइनमेंट -	
		पठन,	II	
		समाचार वाचन		
		समझना : विवरण, वर्णन,		
		विश्लेषण,		
		व्याख्या		
12	सप्ताह चतुर्थ	पुनरावृति	टैस्ट - II	
13	मई	पुनरावृति		
	सप्ताह प्रथम			
14	सप्ताह द्वितीय	पुनरावृति		

Class: Bcom

Semester – (Februrary–May 2023-2024)

Name of Teacher: Manisha

February Week 1 Week 2	Company: Meaning, Characteristics, Advantage and Disadvantage of Incorporation,		
Week 1	Characteristics, Advantage and Disadvantage of Incorporation,		
	and Disadvantage of Incorporation,		
Week 2	Incorporation,		
Week 2	·		
Week 2	Lifting of Corporate Veil:	ı	
	Litting of Corporate ven.		
	Private Company: Meaning,		
	Characteristics, Advantages		
	& Disadvantages of Private		
	Company,		
Week 3	Privileges of Private		
	Company & Conversion of		
	Pvt. Co. into Pablie Company		
	& Vice- Versa;		
Week 4	Types of Companies		
March	Promotion and Incorporation		
Week 1	of Companies		
Week 2	Memorandum of Association;	Assignment I	
	Articles of Association,		
Week 3	Shure Capital, Members &	Test I	
	Shareholders: Borrowing		
	Powers.		
Week 4	Holi Vacation		
April	Directors: Appointment		
Week 1	&Powers		
	Week 3 Week 4 March Week 1 Week 2 Week 3	Private Company: Meaning, Characteristics, Advantages & Disadvantages of Private Company, Week 3 Privileges of Private Company & Conversion of Pvt. Co. into Pablie Company & Vice- Versa; Week 4 Types of Companies March Promotion and Incorporation of Companies Week 2 Memorandum of Association; Articles of Association, Week 3 Shure Capital, Members & Shareholders: Borrowing Powers. Week 4 Holi Vacation April Directors: Appointment	Private Company: Meaning, Characteristics, Advantages & Disadvantages of Private Company, Week 3 Privileges of Private Company & Conversion of Pvt. Co. into Pablie Company & Vice- Versa; Week 4 Types of Companies Promotion and Incorporation of Companies Week 1 Memorandum of Association; Articles of Association, Week 3 Shure Capital, Members & Test I Shareholders: Borrowing Powers. Week 4 Holi Vacation Directors: Appointment

10	Week 2	Legal Position of Directors; Shares and Stock;		
11	Week 3	Share Certificate; Share Warrant.	Assignment II	
12	Week 4	Company Meetings: Meanings, Importance	Test- II	
13	May Week 1	Types, Quorum &Voting Powers, Resolution & Minutes,		
14	Week 2	Case Studies Regarding Company Meetings.		

कक्षा द्वितीय **वर्ष**(चतुर्थ सत्र)

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : कमलेश, सहायक प्रोफेसर, हिन्दी

Sr.	महीना	प्रकरण	शैक्षणिक	विवरण
No.			गतिविधियाॅ	
1	फरवरी	जैनेन्द्र कुमार कासाहित्यिक		
	सप्ताह प्रथम	परिचय		
		त्यागपत्र उपन्यास की व्याख्या		
2	सप्ताह द्वितीय	त्यागपत्र उपन्यास में		
		चित्रितसमस्याएँ		
		त्यागपत्र उपन्यास कीसमीक्षा		
		त्यागपत्र उपन्यास का उद्देश्य		
		मृणाल व प्रमोद की चारित्रिक		
		विशेषताएँ		
		वस्तुनिष्ठ प्रश्न उत्तर		
3	सप्ताह तृतीय	प्रेमचन्द का साहित्यिक परिचय		
		नमक कादारोगा कहानी की		
		व्याख्या		
		तत्वों के आधार पर नमक का		
		दारोगा कहानी की तात्विक		
		समीक्षा		

4	सप्ताह चतुर्थ	वंशीधर व पंडित अलोपीदीन का		
		चरित्र चित्रण		
		वस्तुनिष्ठ प्रश्न उत्तर		
		जयशंकर प्रसाद का साहित्यिक		
		परिचय		
		आकाशदीप कहानी की व्याख्या		
5	मार्च	आकाशदीप कहानी का उद्देश्य		
	सप्ताह प्रथम	आकाशदीप की समीक्षा		
		चंपा व बुद्धगुप्त का चरित्र चित्रण		
		वस्तुनिष्ठ प्रश्न उत्तर		
6	सप्ताह द्वितीय	यशपाल का साहित्यक परिचय	असाइनमेंट- 1	
		परदा कहानी की व्याख्या		
		परदा कहानी की समीक्षा		
		कहानी का उद्देश्य		
		बबर अली खाना का		
		चरित्रचित्रण		

7	सप्ताह तृतीय	पीरबक्श का चरित्र चित्रण	टैस्ट- १	
		वस्तुनिष्ठ प्रश्न उत्तर		
		ऊषा प्रियवंदा का साहित्यिक		
		जीवन परिचय		
		वापसी कहानी की व्याख्या		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	वापसी कहानी का उदेदश्य		
	सप्ताह प्रथम	कहानी की तात्विक समीक्षा		
		वापसी कहानी की विशेषांताएं		
		गजाधर बाबु का चरित्र चित्रण		
10	सप्ताह द्वितीय	वापसी कहानी के वस्तुनिष्ठ		
		प्रश्न उत्तर		
		आचार्य रामचन्द्र शुक्ल का		
		साहित्यिक परिचय		
		लोभ और प्रीति निबंध की		
		ट्याख्या		
11	सप्ताह तृतीय	लोभ और प्रीति निबंध का उद्देश्य	असाइनमेंट -	
		निबंध के अनुसार लोभ व प्रीति	Ш	
		के विविध रूप		
		निबंध की भाषा शैली		
		वस्तुनिष्ठ प्रश्न-उत्तर		

12	सप्ताह चतुर्थ	हजारी प्रसाद द्विवेदी का	टैस्ट - II	
		साहित्यिक जीवन परिचय		
		कुटज निबंध की व्याख्या		
		निबंध की समीक्षा		
		निबंध की भाषा शैली		
		वस्तुनिष्ठ प्रश्न-उत्तर		
13	मई	महादेवी वर्मा का साहित्यिक		
	सप्ताह प्रथम	जीवन परिचय		
		युद्ध और नारी निबंध की		
		व्याख्या		
		निबंध की समीक्षा		
		महादेवी वर्मा के स्त्री चिंतन की		
		विवेचना		
		वस्तुनिष्ठ प्रश्न उत्तर		
14	सप्ताह द्वितीय	प्रभा खेतान का साहित्यिक		
		परिचय		
		आधी दुनिया का श्रम और		
		भूमंडलीकरण की व्याख्या		
		निबंध की समीक्षा		
		वस्तुनिष्ठ प्रश्न उत्तर		

Class: BCOM

Semester – (Februrary–May 2023-2024)

Name of Teacher: Manisha

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Introduction: Basics of		
	Week 1	communication, Seven C's of		
		effective communication,		
2	Week 2	barriers to communication, .		
3	Week 3	ethical context of		
		communication.		
4	Week 4	Business Communication at		
		workplace: Letter writing-		
		component,		
5	March	layout and process, E- mail		
	Week 1	communication,		
6	Week 2	bad news messages, persuasive	Assignment I	
		written communication,		
7	Week 3	, memos, notice, agenda and	Test I	
		minutes of meeting.		
8	Week 4	Holi Vacation		
9	April	Report Writing: Types of		
	Week 1	business reports,		
10	Week 2	, structure of reports, short		
		reports, long reports,		
11	Week 3	abstracts and summaries,	Assignment II	
		proposals.		
12	Week 4	Communication Skills: Reading	Test- II	
		skills, listening skills, note		
		making,		

13	May	, persuasive speaking.	
	Week 1		
14	Week 2	. Body language, Gestures.	

कक्षा : प्रथम वर्ष (द्वितीय सत्र)

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : कमलेश,सहायक प्रोफेसर, हिन्दी

क्र॰	महीना	प्रकरण	शैक्षणिक	विवरण
सं .			गतिविधियाॅ	
1	फरवरी	कबीरदास का जीवन परिचय व		
	सप्ताह प्रथम	साहित्यिक विशेषताएँ		
		कबीरदास केदोहों की व्याख्या		
		कबीरदास की भक्ति भावना		
2	सप्ताह द्वितीय	कबीर दास की सामाजिक चेतना		
		कबीर दास की दार्शनिक चेतना		
		कबीरदास का रहस्यवाद		
		सुरदास का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
		सुरदासकेपदोंकी व्याख्या(राग		
		सारंग, रागसोरठ, राग बिलावल		
3	सप्ताह तृतीय	राग - रामकली, राग सारंग, पदोंकी		
		व्याख्या		
		सुरदास का श्रृंगार वर्णन		
		सुरदास का वात्सल्य वर्णन		
		सुरदास की भक्ति भावना		
		सुरदास की भाषा - शैली		

4	सप्ताह चतुर्थ	भ्रमर गीत की विशेषताएँ		
		कबीरदास व सुरदास केलघु		
		उत्तरात्मक प्रश्न		
		तुलसी दास का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
		बालकांड की संप्रसंग व्याख्या		
		उत्तरकांड की व्याख्या		
5	मार्च	तुलसीदास की भक्ति भावना		
	सप्ताह प्रथम	तुलसीदास की दार्शनिक चेतना		
		तुलसी दास की समन्वय भावना		
		तुलसीदास के साहित्य की		
		प्रासंगिकता		
		वलघु उत्तरात्मक प्रश्न उत्तर		
6	सप्ताह द्वितीय	मीराबाई का जीवन परिचय व	असाइनमेंट- 1	
		साहित्यिक विशेषताएँ		
		मीराबाई के पदों की व्याख्या		
		मीराबाई की भिक्त भावना		

7	सप्ताह तृतीय	मीराबाई की विरह वेदना	टैस्ट- १	
		मीराबाई की प्रेम साधना		
		मीराबाई के वस्तुनिष्ठ प्रश्नउत्तर		
		रसखान का जीवन परिचय व		
		साहित्यिक विशेषताएं		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	रसखान के पदों की व्याख्या		
	सप्ताह प्रथम	रसखान की भक्ति भावना		
		रसखान के काव्य में प्रेम तत्व		
		रसखान का काव्य सौष्ठव		
		वस्तुनिष्ठ प्रश्न - उत्तर		
		बिहारी का जीवन परिचय व		
		साहित्यिक विशेषताएं		
10	सप्ताह द्वितीय	बिहारी केदोहों की व्याख्या		
		बिहारी का श्रृगार वर्णन		
		भक्ति एवं नीति		
		बिहारी कीबहु ज्ञता		
		वस्तुनिष्ठ प्रश्न उत्तर		
		भूषण का जीवन परिचय व		
		साहित्यिक विशेषताएं		

11	सप्ताह तृतीय	भूषणकी व्याख्या राष्ट्रीय भावना, वीर भावना वस्तुनिष्ठ प्रश्न उत्तर	असाइनमेंट - ॥	
12	सप्ताह चतुर्थ	घनानंद का जीवन परिचय व साहित्यिक विशेषताएं छंदो की संप्रसंग व्याख्या प्रेमभावना	टैस्ट - II	
13	मई सप्ताह प्रथम	घनानंद की विरह वेदना घनानंद की भाषा गैली वस्तुनिष्ठ प्रश्न- उतर		
14	सप्ताह द्वितीय	पुनरावृति		

Class: Bcom

Semester – (Februrary–May 2023-2024)

Name of Teacher: Manisha

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Dissolution of Partnership		
	Week 1	firm-Insolvency of Partners		
		(including Garner v/s Murrey		
		Rule),		
2	Week 2	Amalgamation and Sale of		
		Partnership firms,		
3	Week 3	Gradual Realization and		
		Piecemeal Distribution.		
4	Week 4	Hire Purchase System and		
		Installment Payment Systems		
5	March	Accounting for Hire Purchase		
	Week 1	Transactions, Journal entries		
		and ledger accounts in the		
		books of Hire Vendors and		
6	Week 2	and Hire purchaser for large	Assignment I	
		value items including default		
		and repossession, stock and		
		debtors system		
7	Week 3	Joint Ventures: Joint Venture:	Test I	
		Accounting procedures: Joint		
		Bank Acce Maintained by Co-		
		venturer of (a) all transactions		
		(b) only his own transactions,		
		joint venture account.		

8	Week 4	Holi Vacation		
	A '1	D I A A A		
9	April	Royalty Account: Meaning.		
	Week 1	Types of Royalties, Basis of		
		Royalty, Accounting Entries		
10	Week 2	Branch Account: Meaning.		
		Methods- Debtor System,		
		Income Statement System, Stock		
		and Debtor,		
11	Week 3		Assignment II	
		Final Account System, Pros and		
		Cons of Branch Accounting,		
		Accounting Treatment.		
12	Week 4	Insolvency Accounts for Non	Test- II	
		Corporate Entities: Defining		
		Insolvency,		
13	May	, Statement of Affairs as on date		
	Week 1	of order,		
14	Week 2	Difference between Balance		
		Sheet Statement of Affairs and		
		Accounting Treatment		

Class: M.sc Previous

Semester – 2nd semester (Februrary–May 2023-2024)

Subject -Agricultural Geography

Name of Teacher: Ms. Rinku, assistant Professor in Geography

Sr.	Month	Topics to be covered	Academic	Remark
No.			Activity	
1	February	Introduction to the		
	Week 1	Agricultural Geography		-
2	Week 2	Agriculture Geography		
		-Definitions,Nature and		2.
		scope, Approaches of		- T
		Agriculture Geography		
3	Week 3	Determinants of Agriculture -		
	₩	Physical, Cultural		
4	Week 4	Determinants of Agriculture:		
		Technological		
5	March	Origin and Dispersal of	Group	
	Week 1	agriculture	Discussion	
6	Week 2	Concept of land capability	Test 1	
		classification,Land use Survey;		
		Classification (India and		
		British),Land use and cropping		
		pattern, intensity of cropping,		
7	Week 3	Degree of commercialization,		
		diversification and		
		specialization, agriculture		
		productivity and efficiency, crop		
		combination and diversification		
8	Week 4	Holi Vacation		
				,

9	April	Von Thunen model of	Test 2	
	Week I	Agriculture land use,		,
		Agriculture		4
		regionalisation, Whittlesey'agricu		- t
		Itural system, agriculture		
		typology of kostrowiki		
10	Week 2	Agro-climatic region of India,		- 1
		agricultural region of India		
11	Week 3	Regional imbalances in	Assignment 1	
		agricultural productivity in		
		India, Green revolution		
12	Week 4	Neo-liberalization and		
		agriculture in India, food		
		security, food security in India,		
		contemporary issues: food,		
		nutrition, hunger, food security,		
		drought and food security		
13	May	Food aid programs,		the second second second
	Week I	environmental degradation,		
		urban agriculture, contract		
		farming,agri Business		
14	Week 2	Sustainable Agricultural	Test 3	
		Development, agriculture and		8/3
		climate change: impact and		ıı
		adaptation, role of irrigation	,	*

Class:

B.Sc. 1st year (2nd sem.)

Semester -

(Februrary-May 2023-2024)

Name of Teacher: Sh. Anand Kumar

Sr.	Month .	Topics to be covered	Academic Activity	Remark
No.				
1	February	Degree of freedom, constraints		
	Week 1	and its classifications		
		Generalised coordinates,		
2	Week 2	Hamilton's principle and		
	En Jan	derivation of Lagrange's from		
		Hamilton's equation.	-	
3	Week 3	Simple & compound Pendulum,		
		Atwood Machine, principle of		
		virtual work, D'Alembert		
		principle, Lagrange's equations		
		of D'Alembert		
4	Week 4	Reference systems, inertial		
		frames, Gallilean invariance and		
		conservation laws		
		Newtonian relativity principle,	Te.	
		Michelson-Morley experiment		
		and its outcome		
5	March	Special Theory of Relativity:		
-	Week 1	Constancy of speed of light.		
		Postulates of Special Theory of		
		Relativity		
6	Week 2	Lorentz transformation, length	Assignment I	
		contraction and time dilation		
		Relativistic velocity addition		
		theorem,		1
7	Week 3	variation of mass with velocity	Test I	
		and mass energy equivalenc		
		massless particles		





8	Week 4	Holi Vacation		
	•			
9	April	Relativistic Doppler effect		
9	Week 1	relativistic kinematics,		
•	VY CCK 1	transformation of energy and		
		momentum		
10	Week 2	Elasticity: Hooke's law	•	-
10	W CCR 2	Stress strain diagram Elastic		
		moduli Relation between		
		elastic constants		
	1 2 2	Ratio-Expression for Poisson's	A gaign man and II	
11	Week 3	ratio in terms of elastic	Assignment II	
		constants Work done in		
		stretching and work done in		
		twisting a wire - Twisting couple		
		on a cylinder		
12	Week 4	Determination of Rigidity	Test- II	
		modulus by static torsion –		
		Torsional		
		pendulum Determination of		
		Rigidity modulu		
13	May	moment of inertia - q, η and a by		
	Week 1	Searles method.		
14		Revision and problems		

B.Sc. 1st year (2nd sem.)

Semester -

(Februrary–May 2023-2024)

Name of Teacher: Sh. Anand Kumar

Subject: Waves and Electrodynamics

. Si		Topics to be covered ,	Academic Activity	Remark
1	February	Superposition of Two Collinear		
	Week 1	Harmonic oscillations: Linearity		
	· · · · · ·	and Superposition Principle.		
		Oscillations having equal		
		frequencies and (2) Oscillations		
		having different frequencies		
		(Beats).		
2	Week 2	Superposition of Two		
		Perpendicular Harmonic		
		Oscillations: Graphical and		
		Analytical MethodsLissajous		
		Figures with equal an unequal		
,	*	frequency and their uses.		
3	Week 3	Wave Equation, Solution of		
		wave equation, Particle and		
		Wave Velocities, Intensity of		
		Wave		
4	Week 4	Superposition Principle		
		Group velocity, Phase velocity,		
		Definition and Properties of		
		wave front, Huygens Principle		
;	March	Longitudinal Waves: Velocity of		
	Week 1	Longitudinal Waves in a Fluid in		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	a Pipe, Newton's Formula for		
		Velocity of Sound		
		Laplace's Correction,		
		Reflections and transmission of		
		sound waves at a boundary.		

6	Week 2	The string as a force oscillator,	Assignment I	
9		Velocity of Transverse		
		Vibrations of Stretched Strings		
7	Week 3	Transverse waves on a string,	Test I	
	•	Travelling and standing waves	•	
		on a string		
8	Week 4	Holi Vacation		
		Normal Modes of a string,		
9	April	Reflections and transmission of	,	
	Weck 1		,	
		Energy.		v
10	Week 2	Reflections and transmission of		
	H	waves on a string at a boundary		
11	Week 3	Faraday's laws of	Assignment II	
		electromagnetic induction,		
		Lenz's law, self and mutual		
		inductance, L of single coil, M of		
		two coils Energy stored in		
		magnetic field. Equation of		,
		continuity of current,		
		Displacement current		
12	Week 4	Maxwell's equations in vacuum	Test- II	
		and medium, Poynting vector,		
13	May	energy density in		
	Week 1	electromagnetic field,		
		electromagnetic wave		
		propagation through vacuum	ı	
		and isotropic dielectric medium		
14	Week 2	REVISION		

Class:

B.Sc. FINAL YEAR (6TH sem.)

Semester – (Februrary–May 2023-2024)

Name of Teacher: Sh. Anand Kumar

Subject: ATOMIC MOLECULAR AND LASER PHYSICS

Month	Topics to be covered	Academic Activity	Remark
February	Vector atom model, quantum		
Week 1	numbers associated with vector		
	atom mode penetrating and		
	non penetrating orbits		
	(qualitiative description),		=
	spectral lines in different series		
	of ailkali spectra,		
Week 2	spin orbit interaction and doublet		
	term seperation LS or		
	Russel Saunder Coupling		
Week 3	jj coupling (expressions for		
	inteaction energies for LS and jj		
	coupling required).		
Week 4	Zeeman effect (normal and		
•	Anormalous Zeeman pattern of		
	D 1 and D2 lines of Na-atom	,	
March	Paschen, Back effect of a single		
Week 1	valence electron system. Weak		
	field Strak effect of Hydrogen		
	atom. Diseete set of electronic		
	energies of molecules.		
Week 2	quantisation of Vibrational and	Assignment I	
	ratiational energies		
	Raman effect (Quantitative		
	description) Stoke's and anti		
	Stoke's lines		
Week 3	Main features of a laser	Test I	
	Directionality, high intensity,		
	high degree of coherence,		
	February Week 1 Week 2 Week 3 Week 4 March Week 1	February Week 1 Vector atom model, quantum numbers associated with vector atom mode penetrating and non penetrating orbits (qualitiative description), spectral lines in different series of ailkali spectra, Week 2 spin orbit interaction and doublet term seperation LS or Russel Saunder Coupling jj coupling (expressions for inteaction energies for LS and jj coupling required). Weck 4 Zeeman effect (normal and Anormalous Zeeman pattern of D 1 and D2 lines of Na-atom March Week 1 Paschen, Back effect of a single valence electron system. Weak field Strak effect of Hydrogen atom. Diseete set of electronic energies of molecules. Week 2 quantisation of Vibrational and ratiational energies Raman effect (Quantitative description) Stoke's and anti Stoke's lines Week 3 Main features of a laser Directionality, high intensity,	February Weck 1 Neck 1 Neck 1 Neck 1 Neck 1 Neck 2 Spin orbit interaction and doublet term seperation LS or Russel Saunder Coupling Neck 3 Neck 3 Neck 4 Neck 4 Neck 4 Neck 4 Neck 5 Neck 6 Neck 8 Neck 8 Neck 9 Nec

		Holi Vacation		
	Week 4	•		
8		11 man aval acharanas		
		spatial and temporal coherence,		
	April	Einstein's coefficients and		
	Week 1	possibility of amplification,		
		momentum transfer, life time of		
10	Week 2	a level, kinetics of optical		
		obsorption.		
		Threshold condition for laser	Assignment II	
11	Week 3	emission, Laser pumping, and).		
	1.4	He-Ne lase RUBY laser	Test- II	
12	Week 4	(Principle, Construction and		
		Working		
		Applications of laser in the field		
13	May	of medicine and industr		
	Week 1	of filedicine and indus.		
	Week 2	REVISION		
14	WEEK 2			

Class: B Sc+BA IIm Year

Paper - Mechanics

Semester - (Februrary-May (2023-2024)

Name of Teacher: 3. Rity

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.		f .		
1	February	Composition and Resolution	7	
	Week 1	of ferces.	1	
2	Week 2	Resultant of two parallel ferces		
3	Week 3	and their applications.		
4	Week 4	Homents and couples.		
5	March	Analytical Conclition of		
	Week 1	equilibrius of Coplaner forces		
6	Week 2	velocity and acceleration.	Assignment I	
7	Week 3	Relative velocity and acci	Test I	
8	Week 4	Holi Vacation		
9	April	Simple Harmonic Motion		
	Week 1	Elastic Strings.		
10	Week 2	Newton's law of motion		
11	Week 3	work, power and Energy	Assignment II	
12	Week 4	Revision.	Test- II	
13	May	Exlamination-		
	Week 1	Examination -	· · · · · · · ·	
14	Week 2		1-22,008	i

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Class: BSC+BA IIm Year

Paper - Gooups & Rings

Semester - V (Februrary-May 2023-2024)

Name of Teacher: Ds . Rity

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.	,		/	
1	February	Definition of groups, Subgrocups	1	
	Week 1	Cyclic groups, cosets.	•	
2	Week 2	Ander of Subgroup, Caset Decomposition		
3	Week 3	Leignangels theorem Normal Subgroup Buotient group, Homomorphism Tscmorphism		
4	Week 4	Quotient group, Humamorphism		
5	March	Automosphism of cyclic groups		
	Week 1	Permutations, good, layley 13		
6	Week 2	Rings, Subrings, Integral	Assignment I	
7	Week 3	Characteristics of ring. Tobals	Test I	
8	Week 4	Holi Vacation		
			The state of the s	
9	April	Quotient Rings, Ring		
	Week 1	Homomosphism'		
10	Week 2	Eucleiclean sings, polynumial		
11	Week 3	The Eisenstein's Contenion	Assignment II	
12	Week 4	UPD, & Revision	Test- II	
13	May	Eseaminations.		41
	Week 1	× 1	7 %	
14	Week 2		1 cela /	i



Teaching Plan – Project Report based on Physical Landscape (Practical)

Class: M. Sc. Geography (2nd Semester)

Semester – (Februrary–May 2023-2024)

Name of Teacher: Dr. Mukesh Kumar

Month	Topics to be covered	Academic Activity	Remark
February	Basic Information about the Project		
Week 1	of Physical landscape		
Week 2	Preparation for field survey on the		
	Physical landscape		
Week 3	Physical landscape survey will be		
	conducted for project report		
Week 4	After collecting the data from the		
	field survey, data will be analysed		
March	After the analyzing the data, Project		
Week 1	report will be start		
Week 2	Chapter one will be start in this week	Assignment I	
Week 3	Chapter one will be completed	Test I	
Week 4	Holi Vacation		
April	Chapter two will be completed		
Week 1			
Week 2	Chapter three will be completed		
Week 3	Chapter four will be completed	Assignment II	
Week 4	Chapter five will be completed	Test- II	
May	Full project report will be checked		
Week 1	and will be finalized for the final		
	completion		
Week 2	Report will be submitted and		
	practical exam will be conducted in		
	this week		
	February Week 1 Week 2 Week 4 March Week 1 Week 2 Week 3 Week 4 April Week 1 Week 2 Week 3 Week 4 May Week 1	February Week 1 Of Physical landscape Week 2 Preparation for field survey on the Physical landscape Week 3 Physical landscape survey will be conducted for project report Week 4 After collecting the data from the field survey, data will be analysed March After the analyzing the data, Project report will be start Week 1 Chapter one will be start in this week Week 3 Chapter one will be completed Week 4 Holi Vacation April Chapter two will be completed Week 1 Week 2 Chapter four will be completed Week 3 Chapter four will be completed Week 4 Full project report will be checked and will be finalized for the final completion Week 2 Report will be submitted and practical exam will be conducted in	February Week 1 of Physical landscape Week 2 Preparation for field survey on the Physical landscape Week 3 Physical landscape survey will be conducted for project report Week 4 After collecting the data from the field survey, data will be analysed March After the analyzing the data, Project Week 1 report will be start Week 2 Chapter one will be start in this week Assignment I Week 3 Chapter one will be completed Test I Week 4 Holi Vacation April Chapter two will be completed Week 1 Chapter four will be completed Week 3 Chapter four will be completed Week 4 Chapter four will be completed Week 4 Chapter four will be checked and will be finalized for the final completion Week 2 Report will be submitted and practical exam will be conducted in

Lesson plan – even semester Geography / IT For Spatial Sciences Theory

Class: M.SC - I

Semester – (February – May 2023-2024) Second

Name of teacher: SANJAY KUMAR

Sr. No.	Month	Topics to be	Academic	Remark
		covered	Activity	
1.	February	Discuss the		
	Week 1	syllabus and		
		Cartography,		
		Geodesy,		
		Photogrammetry		
2.	Week 2	Remote, Sensing,		
		GIS, GPS		
3.	Week 3	Map As Decision		
		Tool,		
		Conventional		
		Symbols And Sing		
		Survey		
		Instruments,		
		Traversing And		
		Triangulation		
		Electronic (Total		
		Station)		
4.	Week 4	Aerial And		
		Satellite Based		
		Survey		
		Techniques		
		(Photogrammetry,		
		Radar, Lidar)		
5.	March	Use of Colour,		
	Week 1	Qualitative		
		Mapping		
		Technique,		
		Choroschematic		
		And		
		Chorochromatic,		
6.	Week 2	Quantitative	Assignment – I	
		Mapping		

		Techniques,		
		Choropleth,		
		Isopleth		
7.	Week 3	Physical	Test – I	
7.	vveek 3		1621 - 1	
		Surveying, GPS,		
		Total Station,		
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DGPS, GPR		
8.	Week 4	Holi Vacation		
9.	April	Software-		
	Week 1	Definition and		
		Types, operating		
		systems		
10.	Week 2	Application		
		Programmes,		
		Information		
		Technology		
		Introducation,		
		Application of IT		
		in Cartography		
11.	Week 3	Open source	Assignment – II	
		software for GIS –		
		QGIS, Google		
		earth google		
		earth engine,		
12.	Week 4	Geo data	Test – II	
		visualization and		
		analysis -Two,		
		Three, Fourth		
		Dimension		
		viewing,		
		visualization by		
		haper map, virtual		
		images and WEB,		
		GIS		
13.	May	Spatial data base-		
10.	Week 1	survey of India,		
	VVCCIXI	NRSC, BHUVAN,		
		NATMO, GEO		
		Logical survey of		
		India census of		
		India cerisus or India national		
		information		
		centre cadastral		

		maps: open street map for eign sources of data USGS earth explorer	
14.	Week 2	Earth data search: Physical surveying GPS and total sation attribute database statistical abstracts, national information centre	

Teaching Plan –

Class: B.A 1st sem- 2

Semester – (Februrary–May 2023)

Name of Teacher: USHA RANI

Sr.	Month	Topics to be covered	Academic	Remark
No.			Activity	
1	February	Nature and Scope of Economic		
	Week 1	Geography; , Relation of Economic		
		Geography		
2	Week 2	Economic Geography with other	test	
		Branches of Social Sciences;		
3	Week 3	Location and spatial Organization		
		of Economic Activities.		
4	Week 4	Classification of Economic Activity:	test	
		Primary, Secondary and Tertiary;		
5	March	Models in Geography: Von-		
	Week 1	Thunen's Model of Agricultural		
6	Week 2	Holi Vacation		
7	Week 3	Location and Edward Ullman's		
		Model of Spatial Interaction		
8	Week 4	World Natural Resources: its	Assignment 1	
		Types, Utilization and Conservation		
9	Week 5	Spatial Distribution of Food Crops	Class Test 1	
		(Rice and Wheat) with Special		
		Reference to India.		
10	April	Spatial Distribution of		
	Week 1	Commercial Crops (Cotton and		
		Sugarcane) with Special Reference		
		to India.		

11	Week 2	Trade and Transport:		
12	Week 3	Main Features of International	test	
		Trade;		
13	Week 4	Transport Cost	Assignment 2	
14	May	Transport Accessibility and	Class Test 2	
	Week 1	Connectivity;		
15	Week 2	Major Oceanic	test	
		Routes of the World		
16	Week 3	revision		
17	Week 4	revision		
18	Week 5	revision		

कक्षा : प्रथम वर्ष (द्वितीय सत्र)हिन्दी भाषा और संप्रेषण

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : मीना , सहायक प्रोफेसर, हिन्दी

क्रम	महीना	प्रकरण	शैक्षणिक	टिप्पणी
सं.			गतिविधियाॅ	
1	फरवरी	भाषा की परिभाषा		
	सप्ताह प्रथम	भाषा की विशेषताएँ		
		भाषा के विविध रुप		
2	सप्ताह द्वितीय	क्रिया , विभक्त, सर्वनाम, विशेषण,		
		अव्यय		
3	सप्ताह तृतीय	पर्यायवाची शब्द, विलोम शब्द,		
		वाक्य शुद्धि, उपसर्ग, प्रत्यय		
4	सप्ताह चतुर्थ	स्वर की परिभाषा		
		स्वर के प्रकार		
		व्यंजन की परिभाषा		
5	मार्च	व्यंजन के प्रकार		
	सप्ताह प्रथम	वर्णों का उच्चारण स्थान		
6	सप्ताह द्वितीय	संधि की परिभाषा और भेद	असाइनमेंट- 1	
7	सप्ताह तृतीय	समास की परिभाषा और भेद	टैस्ट- 1	
8	सप्ताह चतुर्थ	होली		
		अवकाश		

9	अप्रैल	अलंकार की परिभाषा		
	सप्ताह प्रथम	अलंकार के भेद		
10	सप्ताह द्वितीय	मुहावरे और लोकोक्तियाँ		
		संप्रेषण का अर्थ, परिभाषा, एंव		
		प्रक्रिया		
11	सप्ताह तृतीय	संप्रेषण के चरण	,,	
		वाक्य की परिभाषा	असाइनमेंट -॥	
		वाक्य के अंग		
		रचना के आधार पर वाक्य के		
		प्रकार		
12	सप्ताह चतुर्थ	अर्थ के आधार पर वाक्य के		
		प्रकार	टैस्ट	
		वाक्य रुपांतरण क्या हैं	- II	
		वाक्य रुपांतरण के नियम		
		भावार्थ, व्याख्या, आशय		
13	मई	पेपर		
	सप्ताह प्रथम			
14	सप्ताह द्वितीय			

कक्षा : प्रथम वर्ष (द्वितीय सत्र)अनुवाद

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : मीना , सहायक प्रोफेसर, हिन्दी

क्रम	महीना	प्रकरण	शैक्षणिक	टिप्पणी
सं.			गतिविधियाॅ	
1	फरवरी	अनुवाद का अर्थ, परिभाषा,		
	सप्ताह प्रथम	स्वरूप		
		अनुवाद की विशेषताएँ		
		अनुवाद की प्रकृति एवं प्रक्रिया		
2	सप्ताह द्वितीय	अनुवाद के प्रकार		
		शब्दानुवाद, भावानुवाद, छायावाद,		
		सारानुवाद		
3	सप्ताह तृतीय	अनुवाद के सिद्धांत		
		अनुवाद का महत्व		
4	सप्ताह चतुर्थ	पद्यानुवाद अथवा काव्यानुवाद		
		से क्या अभिप्राय है?		
		पद्यानुवाद (काव्यानुवाद)की		
		विशेषताएँ		
		पद्यानुवाद (काव्यानुवाद) की		
		समस्याएं		

5	मार्च	गद्यानुवाद(कथानुवाद) से क्या		
	सप्ताह प्रथम	तात्पर्य है?		
		गद्यानुवाद की समस्याए		
		विज्ञान संबंधी अनुवाद		
6	सप्ताह द्वितीय	वाणिज्यिक अनुवाद की	असाइनमेंट- 1	
		अवधारणा		
		वाणिज्यिक अनुवाद की		
		समस्याएं		
7	सप्ताह तृतीय	वैज्ञानिक शब्दावली का अनुवाद	टैस्ट- 1	
		मुहावरों का अनुवाद		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	लोकोक्तियों का अनुवाद		
	सप्ताह प्रथम	भारत में अनुवाद प्रशिक्षण के		
		प्रमुख केंद्र		
10	सप्ताह द्वितीय	बैंको में प्रयुक्त होने वाली		
		पारिभाषिक शब्दावली के अंग्रेजी		
		रूप और हिन्दी रूप,प्रशासन में		
		प्रयुक्त होने वाली पारिभाषिक		
		शब्दावली के अंग्रेजी रूप और		
		हिन्दी रूप		

11	सप्ताह तृतीय	रेल्वे में प्रयुक्त होने वाली	असाइनमेंट -	
		पारिभाषिक शब्दावली के अंग्रेजी	Ш	
		रूप और हिन्दी रूप		
12	सप्ताह चतुर्थ	कार्यालयों में प्रयुक्त होने वाली	टैस्ट - II	
		पारिभाषिक शब्दावली के अंग्रेजी		
		रूप और हिन्दी रूप		
13	मई	पेपर		
	सप्ताह प्रथम			
14	सप्ताह द्वितीय			

कक्षा : प्रथम वर्ष (द्वितीय सत्र)मध्यकालीन हिन्दी कविता

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : मीना , सहायक प्रोफेसर, हिन्दी

क्रम	महीना	प्रकरण	शैक्षणिक	टिप्पणी
सं.			गतिविधियाॅ	
1	फरवरी	कबीरदास का जीवन परिचय व		
	सप्ताह प्रथम	साहित्यिक विशेषताएँ		
		कबीरदास के दोहों की व्याख्या		
2	सप्ताह द्वितीय	कबीरदास की भिक्ति भावना		
		कबीरदास का रहस्यवाद		
		कबीरदास की सामाजिक चेतना		
		कबीरदास की दार्शनिक चेतना		
		सूरदास का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
3	सप्ताह तृतीय	सूरदास के पदों की व्याख्या		
		सूरदास की भक्ति भावना		
		सूरदास का श्रृंगार वर्णन		
		सूरदास का वात्सल्य वर्णन		
		भ्रमरगीत की विशेषताएँ		
		स्रदास की भाषा शैली		

4	सप्ताह चतुर्थ	कबीरदास व सूरदास के		
		लघूत्तरात्मक प्रश्न-उत्तर		
		तुलसीदास का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
		बालकांड की संप्रसंग व्याख्या		
		उत्तरकांङ की व्याख्या		
		तुलसीदास की भक्ति भावना		
5	मार्च	तुलसीदास की समन्वय भावना		
	सप्ताह प्रथम	तुलसीदास की दार्शनिक चेतना		
		तुलसीदास के साहित्य की		
		प्रासंगिकता		
		लघूत्तरात्मक प्रश्न-उत्तर		
		मीराबाई का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
6	सप्ताह द्वितीय	मीराबाई के पदों की व्याख्या		
		मीराबाई की भक्ति भावना		
		मीराबाई की प्रेम साधना	असाइनमेंट- 1	
		मीराबाई की विरह वेदना		

7	सप्ताह तृतीय	लघूत्तरात्मक प्रश्न-उत्तर		
	The table to table to the table to			
		रसखान का जीवन परिचय	टैस्ट- 1	
		रसखान के पदों की संप्रसंग		
		व्याख्या		
		रसखान की भक्ति भावना		
		रसखान का काट्य सौष्ठव		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रैल	रसखान की भाषा शैली		
	सप्ताह प्रथम	रसखान के काट्य में प्रेम तत्व		
		लघूत्तरात्मक प्रश्न-उत्तर		
		बिहारी का जीवन परिचय व		
		साहित्यिक विशेषताएँ		
		बिहारी के दोहों की व्याख्या		
		बिहारी का श्रृंगार वर्णन		
10	सप्ताह द्वितीय	बिहारी की भाषा शैली		
		बिहारी की भक्ति एंव नीति		
		बिहारी की बहु ज्ञता		
		लघूत्तरात्मक प्रश्न-उत्तर		
		भूषण का जीवन परिचय व		
		साहित्यिक विशेषताएँ		

11	सप्ताह तृतीय	शिवराज भूषण की संप्रसंग		
		व्याख्या	असाइनमेंट -॥	
		भूषण की राष्ट्रीय भावना		
		भूषण की वीर भावना		
		भूषण की भाषा शैली		
12	सप्ताह चतुर्थ	लघूत्तरात्मक प्रश्न-उत्तर		
		घनानंद का जीवन परिचय	टैस्ट - II	
		घनानंद के छंद की संप्रसंग	3,0 11	
		ट्याख्या		
		घनानंद की प्रेम भावना		
		घनानंद की विरह वेदना		
13	मई	पेपर		
	सप्ताह प्रथम			
14	सप्ताह द्वितीय			

Class: B.A. 1st History

Semester – 2nd (Februrary–May 2023-2024)

Name of Teacher: Anita

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Rise and Growth of Guptas		
	Week 1			
2	Week 2	Rise and Growth of Guptas		
3	Week 3	Harsh and his Times		
4	Week 4	Harsh and his Times		
5	March	South India		
	Week 1			
6	Week 2	Towards the early medieval:	Assignment I	
		Change in Society, Polity and		
		Economy		
7	Week 3	Rashtrakuta Pala and Pratihara	Test I	
		dynasty		
8	Week 4	Holi Vacation		
9	April	Emergence of Rajputs		
	Week 1			
10	Week 2	Invasions of Arabs on Sindh		
11	Week 3	Invasions of Arabs on Sindh	Assignment II	
12	Week 4	Invasions of Mahmood	Test- II	
		Ghaznavi and Muhammad Gauri		
13	May	Invasions of Mahmood		
	Week 1	Ghaznavi and Muhammad Gauri		
14	Week 2	Revision		

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Class:BA/B.ScI

Semester:II (February–May 2023-24)

Subject: Number Theory and Trigonometry

Name of Teacher: Kamal

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Divisibility, GCD and LCM		
	Week 1			
2	Week 2	Prime Numbers, Fundamental		
		Theorem of Arithmetic's		
3	Week 3	Congruence, Linear Congruence,		
		Fermat's Theorem		
4	Week 4	Willson's Theorem and Its		
		Converse, Residue, Chinese		
		Remainder's theorem		
5	March	Complete Residue System		
	Week 1	(CRS) and Residue System of		
		Module (m), Euler's Function		
6	Week 2	Euler's Function Properties,	Assignment I	
		Euler's Generalizations of		
		Fermat's Theorem,		
7	Week 3	Gauss's lemma, Gauss's	Test I	
		reciprocity law, Greatest integers		
		Functions, Divisor Function,		
		Sigma Function		
8	Week 4	Holi Vacation		
9	April	De-Moivre's Theorem and its		
	Week 1	application		
10	Week 2	Expansions of Trigonometry		
		Functions, Direct Circular		
		Function		

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11	Week 3	Hyperbolic Function and their	Assignment II	
		properties		
12	Week 4	Logarithm of a complex	Test- II	
		quantity, Gregory's series,		
13	May	Summation of Trigonometric		
	Week 1	Series		
14	Week 2	Revision of De Moivre's		
		Theorem		

Teaching Plan- 20UCHE202: Chemical Energetics and Functional Group Organic Chemistry -1

20UCHE201: Chemistry of s & p Block Elements And Aromatic Hydrocarbons Alkyl and Aryl Halides

Class: B. Sc. First Year

Semester – Second Semester (February–May 2023-2024)

Name of Teacher: Mrs. Yeshwanti, Assistant Professor of Chemistry

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Introduction to	Group Discussion	
	Week 1	Chemistry of s block		
		Elements: Diagonal		
		relationship,		
		Anomalous behaviour		
		of Lithium and		
		Beryllium compared to		
		other elements in the		
		same group		
		 Salient features of 		
		hydrides, oxides,		
		halides, hydroxides(
		methods of preparation		
		excluded)		
		Behaviour of solution		
		in liquid Ammonia,		
		complex formation		
		tendency of s- block		
		elements		
		• Structure of the		
		following complexes:		
		crown ethers and		
		cryptates of group-1		

2	Week 2	Introduction of p block	
		elements : Boron family	
		(13th group)	
		Diborane: preparation,	
		properties and structure (
		as an example of electron	
		deficient compound and	
		multicenter bonding)	
		Chemical properties and	
		structure of Borazine	
		Relative strength of	
		trihalides of Boron as	
		Lewis acids and structure	
		of aluminium (III)	
		chloride	

3	Week 3	Introduction to Carbon
		family(14th group)
		Catenation, Carbides,
		Fluorocarbons,
		Silicates(structural
		aspects)
		Silicons- general method
		of preparations,
		properties and uses
		Introduction to Nitrogen
		family (15th group)
		Oxides: Structure of
		oxides of nitrogen and
		phosphorus
		Oxyacids: Structure and
		relative acid strength of
		oxy acids of nitrogen and
		phosphorus, structure of
		white, yellow and red
		phosphorus

Oxygen family(16th	Week 4	4
group): Oxy acids of		
sulphur - structure and		
acidic strength,		
hydrogen peroxide -		
properties and uses		
Halogen family (17th		
group): Interhalogen		
compounds (their		
properties and		
structures), hydra and		
oxy acids of chlorine -		
structure and comparison		
_		
of acid strength, cationic		
nature of Iodine		
Chemistry of Noble		
gases: Chemistry of		
xenon, structure and		
bonding in fluorides		
oxides and oxyfluorides		
of xenon		
bonding in fluorides oxides and oxyfluorides		

5	March	Introduction to Aromatic
	Week 1	Hydrocarbons:
		Preparation (Case
		Benzene): from phenol,
		by decarboxylation, from
		acetylene, from benzene
		sulphonic acid
		Reactions: (Case
		benzene): Electrophilic
		substitution: nitration,
		halogenation and
		sulphonation
		Friedel- Craft's reaction
		(alkylation and acylation)
		(up to 4 carbons on
		benzene)
		Side chain oxidation of
		alkyl benzenes (up to 4
		carbons on benzene)

6	Week 2	Introduction to Alkyl Assignment
		Halides (Up to 5
		Carbons): Types of
		Nucleophilic Substitution
		(SN1, SN2 and SNi)
		reactions
		Preparation: from
		alkenes and alcohols
		Reactions: hydrolysis,
		nitrite and nitro
		formation, nitrile and
		isonitrile formation
		Williamson's ether
		synthetic: Elimination vs
		substitution

7	Week 3	Introduction to Aryl Test I	
		Halides Preparation: (
		Chloro, bromo and iodo-	
		benzene case): from	
		phenol, Sandmeyer and	
		Gattermann reactions	
		• Reactions	
		(Chlorobenzene):	
		Aromatic Nucleophilic	
		Substitution (
		replacement by -OH	
		group) and effect of	
		nitrogen substituent,	
		Benzene Mechanism:	
		KNH2/NH3 or	
		(NaNH2/NH3)	
		Reactivity and Relative	
		strength of C- Halogen	
		bond in alkyl, alkyl,	
		benzyl, vinyl and aryl	
		halides	
8	Week 4	Holi Vacation	

9	April	•	Introduction to	Group Discussion	
	Week 1		Thermodynamics -1		
		•	Zeroth Law of		
			thermodynamics, First		
			law of thermodynamics:		
			statement, definition of		
			internal energy and		
			enthalpy		
		•	Heat capacity, heat		
			capacities at constant		
			volume and pressure and		
			their relationship		
		•	Joule's law, Joule-		
			Thomson coefficient for		
			ideal gas and real gas and		
			inversion temperature		
		•	Calculation of w, q, dU		
			and dH for the expansion		
			of ideal gases under		
			isothermal and adiabatic		
			conditions for reversible		
			process		
		•	Temperature dependence		
			of enthalpy, Kirchoff's		
			equation		
		•	Bond energies and		
			applications of B.E.		
			energies energies		

10	Week 2	Introduction to Discussion of
		Thermodynamics -II numerical problem
		Second law of related with topics
		thermodynamics, Carnot
		cycle and it's efficiency
		Concept of entropy -
		entropy as a state
		function, entropy as a
		function of V & T,
		entropy as a function of P
		& T
		Entropy Change in
		physical change, entropy
		as a criterion of
		spontaneity and
		equilibrium
		Entropy Change in ideal
		gases and mixing of
		gases

11	Week 3	Third law of Assignment II
		thermodynamics: Nernst
		heat theorem, statement
		of concept of residual
		entropy, evaluation of
		absolute entropy from
		heat capacity data
		Gibbs and Helmholtz
		functions; Gibbs function
		(G) and Helmholtz
		functions (A) as
		thermodynamic
		quantities
		A and G as criteria for
		thermodynamic
		equilibrium and
		spontaneity, their
		advantages over entropy
		change, variation of of G
		and A with P, V and T

12	Week 4	Introduction to Alcohols: Test- II
		Preparation: Preparation
		of primary, secondary
		and tertiary alcohols:
		using Grignard reagent,
		Ester hydrolysis,
		Reduction of aldehydes,
		ketones, carboxylic acid
		and esters
		Reactions: With sodium,
		HX(Lucas test),
		esterification, oxidation
		(with PCC, alk. KMnO4,
		acidic dichromate, conc.
		HNO3)
		Oppeneauer oxidation
		Diols:(Up to 6 Carbons)
		oxidation of Diols,
		Pinacol- Pinacolone
		rearrangement

13	May	Introduction to Group Discussion
	Week 1	Aldehydes and Ketones
		(aliphatic and aromatic):
		Formaldehyde,
		acetaldehyde, acetone
		and benzaldehyde)
		Preparation: from acid
		chlorides and from
		nitriles
		Reactions - Reaction
		with HCN, ROH,
		NaHSO3, NH2-G
		derivatives
14	Week 2	Iodoform test Group Discussion
		Aldolcondensation
		Cannizaro's reaction
		Wittig reaction
		Benzoin condensation
		Clemensen reduction
		Wolff Kishner reduction
		Meerwein- Pondorff
		Verley reduction
		• Revision

Class: B.Sc. II Semester: 4th (February–May2024)

 ${\bf Subject: Chemistry\ Practical Paper: 20UCHE403}$

Name of Teacher: Pardeep Kumar Jangra

Sr.	Month	Experiments	
No.			
1	FebWeek 1	General discussion of topics related to Chemistry Practical.	
2	Week 2	Colorimetry: To verify Beer-Lambert law for KMnO ₄ anddetermine the concentrationofthegivenKMnO ₄ solution.	
3	Week 3	Colorimetry: To verify Beer-Lambert law for $K_2Cr_2O_7$ and determine the concentration of the given $K_2Cr_2O_7$ solution.	
4	Week 4	Paper Chromatography: Qualitative Analysis ofthefollowing Inorganic cations and an ions by paper chromatography (Pb ² +, Cu ² +, Co ² +, Ni ²).	
5	March- Week1	Paper Chromatography: Qualitative Analysis ofthefollowing Inorganic cations and an ion sbypaper chromatography (Cl̄, Br̄, l̄).	
6	Week 2	Todeterminethespecificrefractivityofagivenliquid.	
7	Week 3	TodeterminetheCSTofphenol—watersystem.	
8	Week 4	Holi Vacation	
9	April -Week 1	Tostudythedistributionofiodine betweenwaterandCCl ₄ .	
10	Week 2	Steamdistillation of Naphthalenefromitssuspension inwater.	
11	Week 3	Steamdistillationseparation ofo-and p-nitrophenols.	
12	Week 4	Columnchromatography: Separation offluoresceinandmethylene blue.	
13	May-Week 1	Columnchromatography: Separationofleafpigmentsfromspinachleaves.	
14	Week 2	Revision	

Lesson Plan – Fundamentals of Information Technology

Class: M.A. Pol. Science

Semester: 4th Semester (February 2023–May 2024)

Name of Teacher: Sh. Lalit Singh, Computer Instructor

Sr. No.	Month	Topics to be covered	Academic Activity	Remark
1.	February Week 1	Introduction and Generations of Computers, Definition of Computer, Block Diagram of		
		Computer, Get familiar with computer parts and		
		use of keyboard and mouse. Components of Computer, Characteristics of Computers,		
2.	Week 2	Limitation of Computer, Human being VS		
		Computer, Change Date and Time Setting. Classification of Computers-According to Purpose, According to Technology, According to Size and Storage Capacity, Application of Computer in		
		various field, Revision.		
3.	Week 3	Data Communication: Types of Communication, Digital Data Communication Techniques, Various applications of Data Communications, Mobile Communication: Fundamentals of Mobile Communication, 2G, 3G, 4G Technologies (GPRS, 3GPP, LTE)		
4.	Week 4	Introduction to Operating System, Types of Operating System, Functions of Operating System, Features of Windows Operating System, Creating		
		Files and Folders, Managing File and Folders.		
5.	March Week 1	Computer Software, Types of Software, Proprietary and Open Source Software. Basics of Windows:- Basic Components of Windows, Icons, Type of Icons, Taskbar, Activating Windows, Desktop Components, Start Menu, Viewing, Arranging, and Working with Files and Folders		
6.	Week 2	Input Devices, Mouse, Keyboards, Light Pen, Track Ball, Joystick, MICR, Optical Mark Reader and Optical Character reader, Scanners, Voice system, Web Camera, Title bar, Output Devices, Hard Copy, Output Devices, Line Printers, Character Printers, Chain Printers, Dot-Matrix Printers, Daisy Wheel Printer, Laser Printer, Inkjet Printers, Plotters,Soft Copy Device – Monitor, Sound Card and Speakers, Revision.	Assignment – I	

7.	Week 3	Memory and Mass Storage Devices, Characteristics	Test – I
		of Memory Systems, Memory Hierarchy, Types of	
		Primary Memory, RAM and ROM ,Secondary and	
		Back-up, Magnetic Disks, Characteristics and	
		Classification of Magnetic Disk, Optical Disk,	
		Magnetic Tape.	
8.	Week 4	Overview of Networking:- Introduction to Network, Type of Network, Network Topologies, Mode of Data Transmission, Transmission Media. Introduction to Internet, Application of Internet,	
		Hardware and Software requirement for internet,	
9.	Week 5	Holi Vacation	
10.	April Week 1	Create personal E-mail account, working with E-mail, Application of Intranet, World wide web, Web Browsers. Search engines, Understanding	
		URL, Domain Name, Social Media Tools & Marketing Strategies, E-Commerce: Types, Tools, Electronic Payment System	
11.	Week 2	Concept of Database, Architecture of Database, Types of Database Introduction to Data Processing, Data Storage, Data Hierarchy, Methods of Organizing Data Various Data Processing Files,	
12.	Week 3	File Organizing, Various Utilities of Files Various Applications of Commerce, Accounting, Purchase, Healthcare, Mathematics, Humanities Videoconferencing: Tools of Videoconferencing, Types of videoconferencing	Assignment – II
13.	Week 4	MS Word Basics, Toolbars, Menus, creating, editing, formatting, Auto Spell and Correct, Format Painter, Mail Merge, Header Footer, Macro	Test – II
14.	May Week 1	MS Excel Basics, Cell, Creating, editing, working in Worksheets, Formulas, Pivot Table and Chart, sorting, filtering, conditional formatting, validating.	
15.	Week 2	MS PowerPoint Basics, Presentation creating, formatting, charts, animations and sounds, animated pictures and objects.	

Lesson Plan – Basics of Computer (IT Level-II)

Class: B.A.

Semester: 4th Semester (February 2023–May 2024)

Name of Teacher: Sh. Lalit Singh, Computer Instructor

Sr. No.	Month	Topics to be covered	Academic Activity	Remark
1.	February Week 1	Basics of E-Mail		
2.	Week 2	Create E-Mail, Inbox, Outbox, sending		
		email,reply, forward, CC,BCC.		
3.	Week 3	E-Governance, Social Networking.		
4.	Week 4	E-Learning, E-Business, Revision and Question Answer.		
5.	March Week 1	MS Word Basics, Open, Save, Close Document, Menu Bar, Ribbon, Page Setup, Formatting & Editing Text.		
6.	Week 2	Table and Printing, Graphics, Mail Merge, Word art, Smart art, Inserting equation	Assignment – I	
7.	Week 3	Header Footer, Track change, Macro, Assignment/Test.	Test – I	
8.	Week 4	Revision and Question Answer. Holi Vacation		
9.	Week 5	Holi Vacation		
10.	April Week 1	Basic elements of Spreadsheet, Cell Manipulation, saving workbook, data entering, editing, formatting.		
11.	Week 2	Formula and Function, Chart and Graphics.		
12.	Week 3	Data Validation, Conditional Formatting, Sorting, Filtering.	Assignment – II	
13.	Week 4	Page Layout, What-if analysis.	Test – II	
14.	May Week 1	Basic of presentation, opening, creating, inserting, deleting and presenting slides.		
15.	Week 2	Enter and edit text, clipart, objects, graphics, views. Transition, slideshow, Timing Slide Master.		

Teaching Plan – Settlement Geography

Class: M.Sc. Geography (4th Semester)

Semester – (Februrary–May 2023-2024)

Name of Teacher: Dr. Mukesh Kumar

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Evolution, size and growth of		
	Week 1	human settlements: Theories of		
		evolution of settlements		
2	Week 2	Size, distribution, spatial and		
		temporal trends in size and growth		
		of settlements		
3	Week 3	Distribution Pattern: Spatial		
		distribution pattern of settlements:		
		Theoretical models and empirical		
		findings		
4	Week 4	Settlement Structure: Physical		
		(characteristics of internal structure		
		and external form)		
5	March	Theories explaining internal		
	Week 1	morphological structure of cities		
6	Week 2	Empirical and theoretical models	Assignment I	
		explaining the functional		
		classification of towns & villages		
7	Week 3	Functional classification of urban	Test I	
		centres, functional typology of		
		villages, functions and scope		
8	Week 4	Holi Vacation		
9	April	Functional structure of towns in		
	Week 1	India. Land use (principles and		
		theories of land use in urban and		
		rural setting		

10	Week 2	Urban and rural setting: house		
		types and building materials,		
		environmental factors, Socio-		
		economic/cultural factors		
		influencing the dynamics of		
		settlement structure		
11	Week 3	theories of Christaller and Losch	Assignment II	
		and their application to settlement		
		hierarchy, factors contributing to		
		hierarchy		
12	Week 4	Central Place theory: measurement	Test- II	
		of centrality and hierarchy		
		Hierarchy of settlements in India –		
		an empirical exercise		
13	May	Issues, perspectives and policies		
	Week 1	on Population and Human		
		Settlements		
14	Week 2	Interface between human		
		settlements and environment.		

कक्षा : द्वितीय वर्ष (चतुर्थ सत्र)हिन्दी गद्य साहित्य

सेमेस्टर - (फरवरी-मई 2023-2024)

नाम : मीना , सहायक प्रोफेसर, हिन्दी

क्रम	महीना	प्रकरण	शैक्षणिक	टिप्पणी
सं.			गतिविधियाॅ	
1	फरवरी	जैनेन्द्र कुमार का साहित्यिक		
	सप्ताह प्रथम	परिचय		
		'त्याग पत्र' उपन्यास की व्याख्या		
2	सप्ताह द्वितीय	'त्याग पत्र' उपन्यास की समीक्षा		
		'त्याग पत्र' उपन्यास में चित्रित		
		समस्याएँ		
		मृणाल व प्रमोद की चारित्रिक		
		विशेषताएँ		
		'त्याग पत्र' उपन्यास का उद्देश्य		
		वस्तुनिष्ठ प्रश्न-उत्तर		

सप्ताह तृतीय	मंशी प्रेमचंद का साहित्यिक		
	परिचय		
	'नमक का दरोगा'कहानी की		
	व्याख्या		
	'नमक का दरोगा' कहानी की		
	समीक्षा		
	वंशीधर का चरित्र चित्रण		
	पंडित अलोपीदीन का चरित्र		
	चित्रण		
सप्ताह चतुर्थ	'नमक का दरोगा' कहानी के		
	वस्तुनिष्ठ प्रश्न-उत्तर		
	जयशंकर प्रसाद का साहित्यिक		
	परिचय		
	'आकाशदीप' कहानी की व्याख्या		
	'आकाशदीप' कहानी की समीक्षा		
	'आकाशदीप' कहानी का उद्देश्य		
मार्च	चंपा का चरित्र चित्रण		
सप्ताह प्रथम	बुद्ध गुप्त का चरित्र चित्रण		
	वस्तुनिष्ठ प्रश्न-उत्तर		
	यशपाल का साहित्यिक परिचय		
	'परदा' कहानी की व्याख्या		
	'परदा' कहानी की समीक्षा		
	सप्ताह चतुर्थ	परिचय 'नमक का दरोगा'कहानी की व्याख्या 'नमक का दरोगा' कहानी की समीक्षा वंशीधर का चरित्र चित्रण पंडित अलोपीदीन का चरित्र चित्रण सप्ताह चतुर्थ 'नमक का दरोगा' कहानी के वस्तुनिष्ठ प्रश्न-उत्तर जयशंकर प्रसाद का साहित्यिक परिचय 'आकाशदीप' कहानी की व्याख्या 'आकाशदीप' कहानी की समीक्षा 'आकाशदीप' कहानी का उद्देश्य मार्च चंपा का चरित्र चित्रण सप्ताह प्रथम बुद्ध गुप्त का चरित्र चित्रण वस्तुनिष्ठ प्रश्न-उत्तर यशपाल का साहित्यिक परिचय 'परदा' कहानी की व्याख्या	परिचय 'नमक का दरोगा'कहानी की व्याख्या 'नमक का दरोगा' कहानी की समीक्षा वंशीधर का चरित्र चित्रण पंडित अलोपीदीन का चरित्र चित्रण सप्ताह चतुर्थ 'नमक का दरोगा' कहानी के वस्तुनिष्ठ प्रश्न-उत्तर जयशंकर प्रसाद का साहित्यिक परिचय 'आकाशदीप' कहानी की व्याख्या 'आकाशदीप' कहानी की समीक्षा 'आकाशदीप' कहानी का उद्देश्य मार्च चंपा का चरित्र चित्रण सप्ताह प्रथम बुद्ध गुप्त का चरित्र चित्रण वस्तुनिष्ठ प्रश्न-उत्तर यशपाल का साहित्यिक परिचय 'परदा' कहानी की व्याख्या

6	सप्ताह द्वितीय	'परदा' कहानी का उद्देश्य		
		बबर अलीखान का चरित्र चित्रण		
		पीरबक्श का चरित्र चित्रण	असाइनमेंट- 1	
		वस्तुनिष्ठ प्रश्न-उत्तर		
7	सप्ताह तृतीय	उषा प्रियवंदा का साहित्यिक		
		परिचय	टैस्ट- 1	
		'वापसी' कहानी की व्याख्या		
		'वापसी' कहानी की समीक्षा		
		'वापसी' कहानी का उद्देश्य		
8	सप्ताह चतुर्थ	होली		
		अवकाश		
9	अप्रै ल	'वापसी' कहानी की विशेषताएँ		
	सप्ताह प्रथम	गजाधर बाबु का चरित्र चित्रण		
		वस्तुनिष्ठ प्रश्न-उत्तर		
		आचार्य रामचंद्र शुक्ल का		
		साहित्यिक परिचय		
		'लोभ - प्रीति' निबंध की व्याख्या		

10	सप्ताह द्वितीय	'लोभ - प्रीति' निबंध की समीक्षा		
		'लोभ - प्रीति' निबंध का उद्देश्य		
		निबंध के अनुसार 'लोभ' के		
		विविध रुप		
		निबंध के अनुसार 'प्रीति' के		
		विविध रुप आचार्य रामचंद्र		
		शुक्ल की भाषा शैली		
		वस्तुनिष्ठ प्रश्न-उत्तर		
11	सप्ताह तृतीय	आचार्य हजारीप्रसाद द्विवेदी का		
		साहित्यिक परिचय	असाइनमेंट - ॥	
		'कुटज' निबंध की व्याख्या		
		'कुटज' निबंध की समीक्षा		
12	सप्ताह चतुर्थ	'कुटज' निबंध की भाषा शैली		
		वस्तुनिष्ठ प्रश्न-उत्तर	टैस्ट - ॥	
		महादेवी वर्मा का साहित्यिक	CC - II	
		परिचय		
		आलोचनात्मक प्रश्न-उत्तर		
		प्रभा खेतान का साहित्यिक		
		परिचय		
		आलोचनात्मक प्रश्न-उत्तर		
13	मई	पेपर		
	सप्ताह प्रथम			

14	सप्ताह द्वितीय		

Class: B.A. 2nd History

Semester – (Februrary–May 2023-2024)

Name of Teacher: Anita

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Interpreting the 18th		
	Week 1	century		
2	Week 2	Emergence of Independent		
		states and establishment of		
		colonial power		
3	Week 3	Expansion and		
		consolidation of colonial		
		power up to 1857		
4	Week 4	Popular Regional		
		Resistance before 1857		
5	March	Revolution of 1857		
	Week 1			
6	Week 2	Colonial economy	Assignment I	
		:Agriculture, Trade and		
		Industry		
7	Week 3	Socio religious movements	Test I	
		in 19th century		
8	Week 4	Holi Vacation		
9	April	Emergence and growth of		
	Week 1	nationalism		
10	Week 2	Indian national freedom		
		movement		
11	Week 3	Communalism :Genesis	Assignment II	
		Growth and Partition of		
		India		

12	Week 4	Communalism :Genesis	Test- II	
		,Growth and Partition of		
		India		
13	May	Advent of		
	Week 1	freedom:constituent		
		assembly ,Establishment of		
		Republic		
14	Week 2			

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Class:B.A/B.ScIII

Paper:Special Function and Integral Transformation

Semester:VI (February–May 2023-24)

Name of Teacher: Kamal

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Power Series		
	Week 1	Solution of Differential Equation		
		by Power Series		
2	Week 2	Definition of Beta Function &		
		Gama Function		
		Existence of Power Series		
		Solution.		
		Frobenius Method		
3	Week 3	Bessel's Equation and Solutions		
		$J_{-n(X)=(-1)}^{n}J_{n}(x), J_{0}(x), J_{1}(x),$		
4	Week 4	$J_{1/2}(x), J_{-1/2}(x),$		
		$J_{n}'(x)+ n/x J_{n}(x)= J_{n-1}(x)$		
		$J_{n}'(x)-n/x J_{n}(x) = -J_{n+1}(x)$		
		$J_{n}'(x)=1/2[J_{n-1}(x)-J_{n+1}(x)]$		
5	March	Generating Function for $J_n(x)$		
	Week 1	Bessel's Function in Integral		
		Form		
6	Week 2	Orthogonality Relation of	Assignment I	
		Bessel's Function, Equation		
		Reducible to Bessel Equation		
7	Week 3	Legendre's Equation	Test I	
8	Week 4	Holi Vacation		
9	April	Hermite's Equation		
	Week 1			

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10	Week 2	Laplace Transforms of		
		Elementary Functions,		
		Differentiable Function, Integral,		
		LJ ₀ (t)		
11	Week 3	Inverse Laplace Transforms	Assignment II	
12	Week 4	Solutions of Differential	Test- II	
		Equations by Laplace		
		Transformation		
13	May	Fourier Transforms, Inverse		
	Week 1	Fourier Transforms, Parseval's		
		Identity		
14	Week 2	Solution of Differential		
		equations by Fourier		
		Transformation		

Lession plan – even semester Geography / Field Survey Practical

Class: B.A III

Semester – (February – May 2023-2024) Sixth

Name of Teacher: SANJAY KUMAR

Sr. No.	Month	Topics to be covered	Academic Activity	Remark
1.	February Week 1	Physics susvey identify the promirent land form and earth surfaces process of the surveyed area		
2.	Week 2	Physics susvey identify the promirent land form and earth surfaces process of the surveyed area		
3.	Week 3	Physics susvey demarcate the land form features of the selected area on a topographical sheet		
4.	Week 4	Physics susvey demarcate the land form features of the selected area on a topographical sheet		
5.	March Week 1	Physics susvey inidentify the various socil types and their characteristics		
6.	Week 2	Physics susvey		

		inidentify the	
		various socil	
		types and their	
		characteristics	
7.	Week 3	Physics susvey	
7.	VVCCKS	classify the flora	
		and fauna of the	
		area	
8.	`Week 4	Holi Vacation	
9.	April	Physics susvey	
7.	Week 1	classify the flora	
	VVCCK	and fauna of the	
		area	
10.	Week 2	Physics susvey	
10.	VVCCKZ	identify the	
		relationship of	
		various land	
		forms, flora,	
		fauna with land	
		use settlement	
		structure and life	
11.	Week 3	style of people Socio- economic	
11.	vveek 3		
		survey- conduct-	
		asocio economic	
		surcey of the	
		households with	
		a structured	
		questionnaire /	
10	\\\\ \. \	sehedule	
12.	Week 4	Socio- economic	
		survey- conduct-	
		asocio economic	
		surcey of the	
		households with	
		a structured	
		questionnaire /	
10		sehedule	
13.	May	Socio- economic	
	Week 1	survey- conduct-	
		asocio economic	
		surcey of the	
		households with	

		a structured	
		questionnaire /	
		sehedule	
14.	Week 2	Completion of	
		practical work	

Lession plan – even semester Geography / Climatology theory

Class: B.A III

Semester – (Februrary – May 2023-2024) Sixth

Name of teacher: SANJAY KUMAR

Month	Topics to be	Academic	Remark
		Activity	
_			
Week 1			
Week 2			
	weather		
Week 3	Composition and		
	struclure of		
	atmosphere		
	,atmosphere		
	temperature		
	vertical and		
	horizontal		
	distribution		
Week 4	Atmospheric		
	pressur and wind		
	distribution		
March	Atmosphereic		
Week 1	moisture		
	humiditu		
	evaporation on		
	of forms of		
	condensation		
Week 2	Types of	Assignment – I	
	J .		
Week 3	Airmass	Test – I	
	February Week 1 Week 2 Week 3 Week 4 March Week 1	February Week 1 February Week 1 Climatology nature and scope climate and weather elements and affecting factor of climate Climatology definitions climate and weather Week 3 Composition and struclure of atmosphere ,atmosphere temperature vertical and horizontal distribution Week 4 Atmospheric pressur and wind distribution March Week 1 March Atmosphereic moisture humiditu evaporation on of forms of condensation Week 2 Types of precipitation world patterns of rainfall	Covered Activity

		classification		
8.	Week 4	Holi Vacation		
9.	April	Atmospherics		
	Week 1	disturbances		
		tropical and		
		temperate		
10.	Week 2	Cyclones and		
		anticyclones		
11.	Week 3	Climatic regions	Assignment – II	
		classification		
		cation of koppen		
12.	Week 4	Climatic regions	Test – II	
		classification of		
		thornthwaite		
13.	May	Climate changes		
	Week 1	and global		
		warming		
		evidence causes		
		consequences		
		and measuredins		
		its control		
14.	Week 2	Revision of third		
		and fourth unit		

Teaching Plan- 20UCHE604: Analytical Chemistry (SEC- IV)

Class: B. Sc. Final Year

Semester – Sixth Semester (Februrary–May 2023-2024)

Name of Teacher: Mrs. Yeshwanti, Assistant Professor of Chemistry

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February Week 1	 Introduction about Diffraction Methods Bragg condition Miller indices 		
2	Week 2	Bragg methodDeby- Scherrer method (sodium chloride crystal)	Group Discussion	
3	Week 3	 Indexing reflections for a cubic system using powder method Identification of unit cells from systematic absences in diffraction pattern 		
4	Week 4	 Structure factor and its relation to intensity and electron density Introduction to phase problem 	Group Discussion	
5	March Week 1	Description of the procedure for an X- ray structure analysis (NaCl)		

		Introduction about	i I	
		Electroanalytical		
		Methods		
	•	Classification of		
		Electroanalytical		
		methods		
7 Week 3	•	Basic principles of pH	Test I	
		metric, potentiometric		
		titrations		
8 Week 4	Holi V	acation		
9 April	•	Conductometric titrations		
Week 1	•	Techniques used for the		
		determination of		
		equivalence points and		
		pKa values		
10 Week 2	•	Introduction about		
		Chromatographic		
		techniques		
	•	Classification		
11 Week 3	•	Mechanism of	Assignment II	
		Chromatography		
		separation: adsorption,		
		partition & ion exchange		
12 Week 4	•	Development of	Test- II	
		chromatograms: frontal,		
		elution and displacement		
		methods		
	•	Qualitative and		
		quantitative aspects of		
		chromatographic		
		methods of analysis		

13	May	Paper and thin layer	
	Week 1	chromatography	
		Liquid chromatography	
		Ion exchange	
		chromatography	
14	Week 2	Revision Group Discussion	

Class: B.Sc 3rd year

Semester –6th semester (Februrary–May 2023-2024)

Name of Teacher: Ms. Priynka

Sr.	Month	Topics to be covered	Academic	Remark
No.			Activity	
1	February	General properties of nuclei:		
	Week 1	constituents of nucleus and their		
		intrinsic properties, quantitative		
		facts about size,mass, charge		
		density, binding energy, average		
		binding energy and it's variation		
		ith mass number		
2	Week 2	Main features of binding energy		
		versus mass no. Curve,N/A plot,		
		angular		
		momentum,parity,magnetic		
		moment, electric moments,		
		Nuclear excited states		
3	Week 3	Liquid drop model		
		approach,semi empirical mass		
		formula and significance of		
		varies terms, condition of		
		nuclear stability, evidence of		
		nuclear shell structure		
4	Week 4	Nuclear magic number, basics		
		assumption of shell		
		model,residual interaction,		
		concept of nuclear forces, Alpha		
		decay: Basics of Alpha decay		
		processes, theory of Alpha		
		emission		

5	March	Gamow factor, Geiger Nuttall		
	Week 1	law,Alpha decay		
		spectroscopy,beta decay,energy		
		kinematics for beta decay,		
6	Week 2	Positron emission, electron		
		emission, electron		
		capture,neutrino		
		hypothesis,gamma decay,		
7	Week 3	Gamma ray emission and	Assignment	
		kinematics,types of nuclear		
		reactions conservation laws,		
8	Week 4	Holi Vacation		
9	April	Kinematics of reactions,Q		
	Week 1	values, reaction rate, reaction		
		cross section, concept of		
		compound and direct reaction,		
10	Week 2	Resonance reaction ,coulomb		
		scattering, interaction of nuclear		
		radiation with matter, Bethe-		
		block formula, energy loss of		
		election,		
11	Week 3	Cerenknow radiation,gamma ray		
		interaction through matter, photo		
		electric effect, Compton		
		scattering, pair		
		production, neutron intery with		
		matter		
12	Week 4	Gas detector, ionisation		
		chamber,GM counter,		
		scintillation detector		
13	May	Semiconductor detector	Test	
	Week 1			

14	Week 2		

Class: B.Sc 4th semester

Semester - (Februrary-May 2023-2024)

Name of Teacher: Priynka

Sr.	Month	Topics to be covered	Academic	Remark
No.			Activity	
1	February	Introduction of Quantum physics		
	Week 1			
2	Week 2	Photon, Photoelectric effect and		
		Einstein photoelectric equation,		
		Compton effect, De- Broglie		
	76 12 2	hypothesis.		
3	Week 3	Davison and Germer		
		experiment,G.P Thomson		
		experiment, phase		
		velocity, group velocity,		
		Heisenberg uncertainty		·
		principle, Time energy and		1
		angular momentum,position		
		uncertainty, uncertainty principle		
		from de- Broglie wave.		
4	Week 4	Postulates of Quantum		1
		Mechanics, wave function and		1
		it's significance, conditions		1
		satisfied by wave Function		1
5	March	Derivation of time dependent		
	Week 1	Schrodinger wave		į
		equation, eigen values and eigen		
	*	functions .Normalisation of		
	,	wave function, observable and		!
•	s in the same	operator,		

	•	Derivation of time independent Schrodinger wave equation, Solution of		
		Schrodinger equation for.		
		harmonic oscillator ground state		
		and excited states, free particle in		
		one		
7	Week 3	free particle in one dimensional	Test I	
		box.One dimensional potential		
		barrier E>V.one dimensional		
21		potential barrier E <v< td=""><td></td><td></td></v<>		
		Penetration depth, penetration of		*
		One dimensional potential		
		barrier E>V,one dimensional		
		potential barrier E <v< td=""><td></td><td></td></v<>		
		Penetration depth, penetration		
8	Week 4	Holi Vacation		
A .				
9	April	Semiconductor: p and n type		
	Week 1	semiconductor, Barrier		
		formation in pn junction diode,		
		Drift and diffusion currents pn		
		junction and it's		
		characteristics, Statics and		
		dynamic resistance,pn junction		
		diode as a half wave rectifier, full		
		wave rectifier		

		, I		•
Wee	ek 2	Calculation of ripple factor and		
		rectification efficiency,npn and		,
		pnp transistor, characteristics		
		CB,CC,CE		
		configuration, active, cut off and		
		saturation regions, current gains		
		alpha and beta,Dc load line and		
192		Q - point	Assignment II	
11 V	Veek 3	h- parameter Equivalent	Assignment	
		circuit, field effect transistor		
		FET,MOSFET, advantages of		
	·	using Field effect Transistor,		
		Amplifier and their biasing,		
		Voltage divider biasing ckt for		
		CE amplifier, biasing		
		stabilization ,class A,B,C .		
F		amplifier,RC coupled amplifier		
		and it's frequency response,		
12	Week 4	Feedback amplifier, operational	Test- II	
Ī.		amplifier, characteristics of an		
3		ideal and practical op amp,open		Y
To the second		and closed loop		
		gain,CMRR,concept of virtual		
		ground, applications of op-		
		Amps: 1. Inverting and non		
		inverting amplifier,		
		Differentiator, integrator		
13	May	Schrodinger equation in		
	Week 1	spherical cordinates, separation		
- ,		of variables for r, theta, fhai,		
		solutions for theta and phai		
N. Paylor	e la calacteria a	equation, spherical harmonics,	L. Despe	

14	Week 2	Space quintation, electron apin	në:	
		and spin angular		
		momentum,larmen theorem, egin		
	3	magnetic moment , Gyro		
		magnetic ratio and blice		
		magneton.		

14	Week 2	Space quantation, electron upon	una'	
		and apin mydler		
		mimentum larmin theorem ,apin		
	,	magnetic moment , Gyro		
		magnetic ratio and blue		
		magneton		

Class: B.A.I (Micro Economiu)
Semester - (February-May 2023-2024)

(Sem - II)

Name of Teacher: Paranjur Singh

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.		•	· ly	
1	February	Characteristics of		
	Week 1	Parfeet Competitions Priedeterm orbin under Perfect Compromi Equilibrium of firm		
2	Week 2	Priedetem when lunder		
3	Week 3	Egrilibium of firm		
4	Week 4	Familibrium of Industry		
5	March	characteristics, Egulli	neg	
	Week 1	of the Monopoly firm	•	
6	Week 2	Concept of Suppoy Curre	Assignment I	
7	Week 3	Price discrimation	Test I	
8	Week 4	Holi Vacation		
9	April	Improject Marked,		
	Week 1	Imperfect Market, Selling Price, RXCers Capilaty		
10	Week 2	olisopoly Counnol Mos Beitand model	lel	
11	Week 3	Bertrand model	Assignment II	
12	Week 4	Market failure.	Test- II	
13	May	Theory of distribution		
	Week 1			
14	Week 2	Rent, Quan Rant		

Class: B.A. II (Macro Recovernic) (Sem-IV)

Semester - (Februrary-May 2023-2024)

Name of Teacher: farangier Sup

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				,
1	February	Concept of Honey in a Hoder	19	
	Week 1	Economy Monethy Aggregal furthers of Money Demanton Money Supply Credit Cheann	J.	-
2	Week 2	Moves Suppry, Credet Creaking		
3	Week 3	T FOLLY		
4	Week 4	Types of Anglation, Phillips		
5	March	Concept and types of Inflato	m	
•	Week 1	Concept and type of Inflation		
6	Week 2	Fiscal Polocy	Assignment I	<u> </u>
7	Week 3	monetary folicy	Test I	
8	Week 4	Holi Vacation		
9	April	Derivation of 25 and In		
	Week 1	function, 75-LM and Agaregate Demand	1	
10	Week 2	Shifts in AD curre		
11	Week 3	Features of trade cycl	e Assignment II	
12	Week 4	Treories of trade cycles		1
13	May			
	Week 1	meany, courant and Cajoital Account. Market for foreign Exchange		
14	Week 2	Deterimination of Excluse	Po F-2	

Class: BA. III (Development Reonomies) (Sens VI)

Semester - (Februrary-May 2023-2024)

Name of Teacher: Paramjet Sugh

Sr.	Month	Topics to be covered	Academic Activity	Remark ·
No.				Kemark .
1	February	features of under	2.3	·
	Week 1	Developed Countries		
2	Week 2	Development Determinants		
3	Week 3	Measurmey and obstable	1	
4	Week 4	Rostowie Theory		
5	March	Role of learing, educati	241	
	Week 1	and Research, thuman .		
6	Week 2	Conceps and measurmen	Assignment I	
7	Week 3	of HOI, Solow Mode	Test I	
8	Week 4	Holi Vacation		
		•		
9	April	Balanced and unbalance	g	
	Week 1	Growth, Lewis and Leibans	Hein model	
10	Week 2	Critical Minimum effor	Those	
11	Week 3	Recent Burome Policy	Assignment II	
12	Week 4	Post Reform Foling in	Test- II	
13	May	Economic Reform &	7	
	Week 1	LP6 Policy	girl 4.	
14	Week 2	MITI Agogendits Funcho	n	

Class: B. Corre I (Cem-II)

Semester - (Februrary-May 2023-2024)

Name of Teacher: ParayilSun

Sr.	Month	Topics to be covered	Academic Activity	Remark · '
No.			ъ н	
1	February	Menny, Elements Element	to	
	Week 1	Meaning, Elements Elements Importance of Business Envi	zonet	
2	Week 2	Objectives from Environ		
3	Week 3	SNOT/SWOC, BTOP And you	3	
4	Week 4	NITI Augog		
5	March	r. :		
	Week 1	& Lohomi & Environment		
6	Week 2	Diffrata Definera, Diff.	Assignment I	
7	Week 3	between Baloner of Trade	Test I	
8	Week 4	Holi Vacation		
	•			
9	April	Bolame of Payment Uses)	
	Week 1	unempoyment, infolion		•
10	Week 2	Industrial Sickness Regi Imbhalanes	oral	-
11	Week 3	Meaning, objective tristry		
12	Week 4	of Industrial Policy	Test- II	
13	May	Monetary Folicy firal		
	Week 1	Monetary Folicy fisal Policy Liberalization, for	iratischin and G.	Pobalesch
14	Week 2	I winds mad Monetag	First, WTO and	world Bar

Lesson Plan – Even Semester

CLASS: M.SC (P) GEOGRAPHY (Population and Settlement Geography)

SEMESTER- 2ND (February-May 2023-2024)

NAME OF TEACHER- SH.TASVIR SINGH

Sr.	Month	Topic to be covered	Academic activity	Remark
No. 1.	February Week 1	Evolution of population geography, scope and content of population of geography, source of data and nature of data		
2.	Week 2	World and population distribution and growth with respect to stage of demographic transition		
3.	Week 3	Population growth distribution and trend with respect to India and sub-national level		
4.	Week 4	Age structure, overall sex ratio, child sex ratio, sex ratio at birth, elderly sex ratio		
5.	March Week 1	Sex ratio and there temporal trend and special pattern in India phenomenon of ageing population		
6	. Week 2	Population dynamics, Fertility, Mortality and migration, basic measures, spatial and temporal trends		
7	Week 3	Socio-cultural literacy and education, religious composition, rural-urban residence	Test-1	
8	Week 4	Holi Vacation		
9.	. April Week 1	Definition and scope of settlement geography. Locational aspects site situation		
10	Week 2	Size, Pattern, Shape, Function, Distribution, Density, Spatial distribution and pattern and method of analysis distribution		
1	Week 3	Settlement types based on site situation, population size and function. Spatial and temporal		

	trends in size and growth of settlements with special referenced India		the factor of the control of the con
1. Week 4	Function of settlements rural- urban distribution. Empirical and theoretical model explaining the functional classification of towns and villages	Test-2	•
13 May Week 1	Functional, Classification of urban centers, Functional typology of villages		
1 Week 2	Functional landscape, functional structure of town in India		

Class:

BA 4th Sem

(Februrary-May 2023-2024)

Name of Teacher: Gunpal Singh

Sr.	Month	Topics to be covered	Aeademie Aetivity	Remark
1	February	Introduction to the syllabus and	,	All the section of the sec
3	Week 2	examination pattern The Gold Watch - Text &		
1		Exercise	V	
2	Week 3	Sonnet XVIII - Text & Exercise	20 20 20 20 20 20 20 20 20 20 20 20 20 2	
3	Week 4	A Client- Text & Exercise		
4	Week 5	Know Then Thyself – Text & Exercise		
5	March Week 1	Karma – Text & Exercise	•	*
6	Week 2	The World is Too Much with Us	Submission of	Vision and Control of
		- Text & Exercise	Assignment	
7	Week 3	English Speech Sounds –	Test I	Textual
		Vowels		questions
		Consonants		Lesson 1-3
8	Week 4	Holi Vacation		
9	April	Transcription of Speech Sounds		
	Week 1	-Textual Exercises	•	
10	Week 2	Upper Division Love – Text & Exercise		
1	Week 3	The Bangle Sellers	Assignment II	a
		-Text & Exercise		

12	Week 4	Precis - Exercises	Tem-11	Cremmar & Remaining Chapters
13	May Week 1	Translation Exercises		
,14	Week 2	Choup Discussion		detected terpies on he
			in the second se	given on the
	A CONTRACTOR OF THE PROPERTY O			dasman



Teaching Plan – Climatology

Class: - M.Sc Geography

Semester – 2nd Sem. (Februrary – May 2023- 2024)

Name of Teacher: Dr Anil Kumar

Sr. No.	Month	Topics to be covered	Academic Activity	Remark
1.	February Week 1	Climatology: Definition, nature and scope; Climatology and Meteorology. Atmosphere: composition and structure		
2.	Week 2	Insolation: Solar radiarion and terrestrial radiation, latitudinal and seasonal variations		
3.	Week3	Effects of atmosphere: green house effect heat budget and Latitudinal heat balance		
4.	Week 4	Temperature: Processes of heat energy transfer, heating and cooling of atmodphere, horizontal and vertical distribution, inversion of temperature	Class Test	
5.	March Week 1	Atmospheric pressure: measurement and its distribution pattern vertical, horizontal and 3 seasonal variations		
6.	Week 2	Gerneral circulation: planetary, geostrophic,	Assignment	



		subtropical, westerlies and polar winds		1/2
7.	Week 3	Tricellular meridional circulation, walker circulation- ENSO and La Nina	Seminar on Changing Climatic Conditions	
8.	Week 4	Holi Vacation		
9.	April Week 1	Atmospheric moisture: sources of atmosphere moisture? Types and distribution of humidity and evaporation		
10.	Week 2	Condensation: conditions, forms and types. Precipitation: process, form, types and distribution.		
11.	Week 3	Atmosphere equilibrium: stability and instability. Adiabatic process of temperature change, lapse rate: dry and wet adiabatic rate	Assignment 2	
12.	Week 4	Air masses: definition, characteristics, modification and classification		
13.	May Week 1	Fronts: frontogenesis. Frontlysis and classification Atmospheric disturbances	Class Test 2	

14.	Week 2	Climatic changes	
		Evidences: Theories of	
		Climate Change	
		Milankovitch Cycle,	
		Atmosphere Dust 10	
		Hypothesis, Carbon	
		Dioxide Theory and	
		Astronomie Theory of	
		Climate Change	

Class:

BA 2nd Sem

Semester -

(Februrary-May 2023-2024)

Name of Teacher: Gunpal Singh

Sr.	Month	Topics to be covered	Academic	Remark
No.		*	Activity	
1	February	Introduction to syllabus and		
	Week 2	examination pattern		
2	Wash 2	Three Questions- Text & Exercise Where the Mind is without Fear	~~~	
2	Week 3	- Text & Exercise		
		Money Madness - Text &		
2-1		Exercise		
3	Week 4	Work Brings Solace- Text &		
		Exercise		
4	Week 5	Why is the Sea Blue-Text &		1 m
		Exercise		• 3
5	March	Leisure- Text & Exercise		
	Week 1			
6	Week 2	Agreement of Verb and Subject-	Assignment I	
		Exercise	_ =	
	æ	Confusion of Adjective and		18
	•	Adverb - Exercises	,	
7	Week 3	Difficulties with Comparatives	Test-1	Textual
	. · ·	and Superlatives -Exercise		questions
		Introductory There - Exercise		Lesson 1-3
8	Week 4	Holi Vacation		
	, ,	•		= 6
9	April	The Infinitive – Exercise		
	Week 1	Anticipatory It with Noun and		
		Adjective Clauses- Exercises		•
10	Week 2	Appendix Exercise for Practice		
		-The Position of Adverb		V = 200 €
11	Week 3	110100101010101010	Assignment II	
が見る			Bulk of Walter Sevenic Victor	

12	Week 4	The Chicago Speech- Text & Exercise	Test-2	Granumae Empira Leanna 1-7
13	May Week J	Appendix Exercise for Practice Tenses		
14	Week 2	Group Discussion		Selected implex to be
				given on the
				classimin

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Lesson Plan- 2023-2024 (Even Semester)

Class: B.Sc. III Semester -VI

Session: 2023-2024 (February-May 2024) Name of Teacher: Dr. Meena Kumari

20UCHE602: QUANTUM MECHANICS MOLECULAR SPECTROSCOPY (Theory)

20UCHE601: ORGANIÇ SPECTROSCOPY-II (Theory)

No	Sr.	Month	Topics to be covered	Academic	Remark	
Week 2 Week 2 Interaction of electromagnetic radiation with molecules and various types of spectra Born Oppenheimer approximation Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Week 3 Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,	No			Activity		
Week 2 Interaction of electromagnetic radiation with molecules and various types of spectra Born Oppenheimer approximation Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems 3 Week 3 Introduction to Vibrational Spectroscopy -	1	February	. ,	Undergoing Pr	ractical	
molecules and various types of spectra Born Oppenheimer approximation Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Week 3 Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,		Week 1		examination (odd sem)		
Born Oppenheimer approximation Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,	2	Week 2	• Interaction of electromagnetic radiation with	Question -		
Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			molecules and various types of spectra	Answer		
Introduction to Rotational Spectroscopy -Rigid rotor and non-rigid rotor Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,		3.	Born Oppenheimer approximation	Discussion		
Selection Rules, Their energy expressions and energy level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,		- 14/11 TE	Introduction to Rotational Spectroscopy -Rigid rotor	-		
level diagram Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,		· _	and non-rigid rotor	-		
Intensities of spectral lines, Determination of bond lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			Selection Rules, Their energy expressions and energy.			
lengths of diatomic and triatomic molecules, Isotopic substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			level diagram			
substitution. Numerical Problems Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			• Intensities of spectral lines, Determination of bond			
Numerical Problems Introduction to Vibrational Spectroscopy -			lengths of diatomic and triatomic molecules, Isotopic			
Week 3 Introduction to Vibrational Spectroscopy - Classical concept of vibration, Harmonic and Answer Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			substitution.			
Classical concept of vibration, Harmonic and Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			Numerical Problems			
Anharmonic Oscillator, Selection rules, Their energy expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,	3	Week 3	Introduction to Vibrational Spectroscopy -	Question -		
expressions and energy level diagram Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,		-	Classical concept of vibration, Harmonic and	Answer		
Computation of force constant, anharmonicity constant, Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands Vibrational-rotational spectroscopy: P, Q, R branches,			Anharmonic Oscillator, Selection rules, Their energy	Discussion		
Morse potential curve, dissociation energies, Vibrating diatomic rotator, fundamental frequencies, overtones, hot bands • Vibrational-rotational spectroscopy: P, Q, R branches,			expressions and energy level diagram			
diatomic rotator, fundamental frequencies, overtones, hot bands • Vibrational-rotational spectroscopy: P, Q, R branches,		=	Computation of force constant, anharmonicity constant,		· •	
hot bands • Vibrational-rotational spectroscopy: P, Q, R branches,	•	E **-X	Morse potential curve, dissociation energies, Vibrating			
Vibrational-rotational spectroscopy: P, Q, R branches,			diatomic rotator, fundamental frequencies, overtones,	= '	41 - 17	
			hot bands			
Numerical Problems			Vibrational-rotational spectroscopy: P, Q, R branches,			
			Numerical Problems			

Week 4			
Week 4	 Introduction to Raman Spectroscopy: Qualitative 	Question -	
	treatment of Rotational Raman effect, Effect of miclear	Answer	
	spin, Selection Rules and energy expressions	Discussion	
	 Vibrational Raman spectra, Stokes and anti-stokes lines, 		
	their intensity and rule of mutual exclusion.		
	• Introduction to Electronic Spectroscopy: Franck-	9	
	Condon principle, electronic transitions, singlet and		
	triplet states, Jablonski Diagram		er .
	• Fluorescence and phosphorescence, dissociation and		
	predissociation.		
Week 5	calculation of electronic transitions of polyenes using	Test I	the state of the s
	free electron model.		
	Numerical Problems	U	
	Problems of Students		
March	Introduction to Quantum Mechanics-I, Black-body		
Week 1	radiation, Plank's radiation law, photoelectric effect,		
	heat capacity of solids, Compton effect		
Week 2	Wave function and its significance of Postulates of	Question -	
	quantum mechanics, quantum mechanical operator,	Answer	
2 -4	commutation relations, Hamiltonian operator,	Discussion	
-16.75	Hermitian operator, Role of operators in quantum		
	mechanics		
	Schrodinger equation and its application to free		
Ī.	, , , , , , , , , , , , , , , , , , , ,		
Week 2		Overting	
week 3			•
		Discussion	
	polar coordinates		
	 and separation of variables, Spherical harmonics, and 		
1	qualitative discussion of solution.	Assignment 1	
	Week 5 March Week 1	spin, Selection Rules and energy expressions Vibrational Raman spectra, Stokes and anti-stokes lines, their intensity and rule of multual exclusion. Introduction to Electronic Spectroscopy: Franck-Condon principle, electronic transitions, singlet and triplet states, Jablonski Diagram Fluorescence and phosphorescence, dissociation and predissociation. Week 5 calculation of electronic transitions of polyenes using free electron model. Numerical Problems Problems of Students Introduction to Quantum Mechanics-I, Black-body radiation, Plank's radiation law, photoelectric effect, heat capacity of solids, Compton effect Week 2 Week 2 Wave function and its significance of Postulates of quantum mechanics, quantum mechanical operator, commutation relations, Hamiltonian operator, Hermitian operator, Role of operators in quantum mechanics Schrödinger equation and its application to free particle and particle in a box problem, quantization of energy levels, zero-point energy and Heisenberg uncertainty principle, wave functions, distribution functions, nodal properties Week 3 Extension to three dimensional boxes, degeneracy. Rigid rotator model of rotation of diatomic molecule, Schrödinger equation, transformation to spherical polar coordinates	spin, Selection Rules and energy expressions • Vibrational Raman spectra, Stokes and anti-stokes lines, their intensity and rule of mulual exclusion. • Introduction to Electronic Spectroscopy Franck-Condon principle, electronic transitions, singlet and triplet states, Jablonski Diagram • Fluorescence and phosphorescence, dissociation and predissociation, Week 5 • calculation of electronic transitions of polyenes using free electron model. • Numerical Problems • Problems of Students March Week 1 • Introduction to Quantum Mechanics-I, Black-body radiation, Plank's radiation law, photoelectric effect, heat capacity of solids, Compton effect Week 2 • Wave function and its significance of Postulates of quantum mechanics, quantum mechanical operator, commutation relations, Hamiltonian operator, Hermitian operator, Role of operators in quantum mechanics • Schrödinger equation and its application to free particle and particle in a box problem, quantization of energy levels, zero-point energy and Heisenberg uncertainty principle, wave functions, distribution functions, nodal properties Week 3 • Extension to three dimensional boxes, degeneracy. • Rigid rotator model of rotation of diatomic molecule, Schrödinger equation, transformation to spherical polar coordinates

	_		The state of the s		
	4	Week 4	 Introduction to Raman Spectroscopy: Qualitative 	Question -	
			treatment of Rotational Raman effect, Effect of nuclear		
			spin, Selection Rules and energy expressions	Discussion	
			 Vibrational Raman spectra, Stokes and anti-stokes lines, 		
•			their intensity and rule of mutual exclusion.		
		**	• Introduction to Electronic Spectroscopy: Franck-	J.	
			Condon principle, electronic transitions, singlet and		
			triplet states, Jablonski Diagram		-
			Fluorescence and phosphorescence, dissociation and		
			predissociation,		
	5	Week 5	calculation of electronic transitions of polyenes using	Test I	-
			free electron model.		
			Numerical Problems	-	
			Problems of Students		
1	6	March	Introduction to Quantum Mechanics-I, Black-body		
		Week 1	radiation, Plank's radiation law, photoelectric effect,		
			heat capacity of solids, Compton effect		100 August
-	7	Week 2	Wave function and its significance of Postulates of	Character	
	į.		1	Question -	
		522	quantum mechanics, quantum mechanical operator,	Answer	
		476.78	commutation relations, Hamiltonian operator,	Discussion	
			Hermitian operator, Role of operators in quantum		
	11.	が、	mechanics		
		•	 Schrodinger equation and its application to free 		
-			particle and particle in a box problem, quantization of		•
			energy levels, zero-point energy and Heisenberg		
			uncertainty principle, wave functions, distribution		
			functions, nodal properties		
8	1	Week 3	Extension to three dimensional boxes, degeneracy.	Question -	р.
			Rigid rotator model of rotation of diatomic molecule,	Answer	
			Schrödinger equation, transformation to spherical	Discussion	
			polar coordinates		
			•		
			• and separation of variables, Spherical harmonics, and	Assignment I	
			qualitative discussion of solution.		

9	Week 4				
7	WEEK 4	• Separation of variables,		3 (3)	
		Spherical harmonics, and qualitative discussion of		· ·	ing K
		solution.			
	*	Problems of Students			-
		Holi Vacations		•	-
10	Week 5	Holi Vacations			٠,
11	April	Recapitulation of Infrared Spectroscopy Concepts	Question -		
	Week 1	Application of IR in structure elucidation of organic	Answer		
		compounds-carbonyls and effect of substituents on it,	Discussion		
	e	C-H, NH, O-H vibrations and H-bonding- unsaturated,			
	, ,	mono- and disubstituted aromatic compounds,	•		
	_	Metal-ligand vibrations, group frequencies of complex			
	like in	ligands-CN stretching and effect of coordination on it,			
		nitro and nitrite and C=O ligands and effect of their	,		
	V	coordination with metal ions. Applications of far and			
		near IR.		-	
12	Week 2	Introduction to NMR including instrumentation.	Question -		
		Chemical shift and its measurements. Factors	Answer		
		influencing chemical shift. Magnetic anisotropy. The	Discussion		
		relaxation processes. Mechanism of nuclear spin-spin			
		interactions. Different spin systems. The coupling			
		constant and factors effecting coupling constant, Long			
		range spin-spin coupling.			
		Simplification of complex proton spectra with			
		examples. Interpretation of first order and complex	•	•	
		PMR Spectra of specific organic compounds.			
		 Distinction between geometrical isomers. 			
		Study of some dynamic effects by 1H NMR, Hindered		4	
		rotation, kete-enol tautomerism, aromaticity. Nuclear	1		
		overhauser effect.			
		Overhauser erreet.			

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Lesson Plan-2023-2024 (Even Semester)

Class: B.Sc.III

Semester-VI

Session: 2023-2024 (Februrary-May 2024)

Name of Teacher: Dr. Meena Kumari

20UCHE604: ANALYTICAL CHEMISTRY (SEC-IV)

Unit I & II (Class: Wednesday and Thrusday)

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.		*		
1.	February	-		
	Week 1			
2	Week 2	Introduction to error analysis		
		 Methods of sampling and associated 	•	
		errors		
3	Week 3	Classification of errors		
		 Propagation of errors 		
		Treatment of errors	4	
4	Week 4& 5	Normal distribution		
		• Tests of Significance and	_	4
		Confidence limits	× 9 21	= 4
5	March	● Introduction to UV-Visible	- Sec _{man} to Large to	
	Week 1& 2	Spectrometry Instrumentation	F - %	
		Basic principles of instrumentation		
		(choice of source, monochromator	1	
		and detector) for single beam and		
		double beam instruments		
6	Week 3	● Introduction to Infra red	Question -Answer	
	٠.	Spectrometry Instrumentation	Discussion	
		Basic principles of instrumentation		
		(choice of source, monochromator		
		and detector) for single and double		
		beam instruments	Assignment I	
7	Week 4	Sampling Techniques	Test- II	
		• Structural illustration through	1	
		interpretation of data	= -	
		• Effect and importance of isotopic		- n n
•		substitution		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
8	Week 5	Holi Vacation		
J	WEEKS	Ton vacation		
•		· ·		

Lesson Plan-2023-2024 (Even Semester)

9	April Week 1	 Introduction to Flame Atomic Absorption and Emission Spectrometry, Basic principles of intrumentation - choice of source, monochromator, detector 	
10	Week 2	Basic principles of intrumentation choice of flame and burner designs Techniques of atomization and sample introduction	
11	Week 3	 Method of background correction Sources of chemical interferences and their method of removal Techniques for the quantitative estimation of trace level of metal ions from water samples 	Assignment II
12	Week 4& 5	 Problems of the students Question - answer discussion 	Theory/practical Examinations may
13	May Week 1	• Revision .	start anytime.
14	Week 2	Revision	

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Teaching Plan - Chemistry Practical

Class: B.Sc. 111 Session: 2023-2024

Semester -6th (February-May 2024)Name of Teacher: Dr. Meena Kumari

S.	Month	Topics to be covered	Academic	Remark
No.			Activity	
1	February	• Introduction to practical syllabus, marking pattern		*
	Week 1	• About precautions to be taken in lab, common		
		equipments to be used, name of various glass		
		wares, organization of chemicals in laboratory		
		and common instructions for practicals		
2	Week 2	• To prepare o-chlorobenzoic acid from anthranilic		
		acid.		
		• File preparation		
3	Week 3	● To prepare p-bromoaniline from p-		
		bromoacetanilide.		
		• File preparation		
4	·Week 4	● To prepare m-nitroaniline from m- dinitrobenzene.		*
		• File preparation	,	
5	March	● To prepare S-benzyl-iso-thiouronium chloride		
	Week 1	from thiourea.		
		• File preparation		
6	Week 2	• File checking		
		• Preparation of viva- voce from organic section		
7	Week 3	Group Discussion	Viva-voce	
		• General introduction about physical chemistry	mock test	
		practicals '	1	•
8	Week 4	Holi Vacation		
				4
9	April	● To determine the strength of given HCl		
•	Week 1	potentiometrically.		
		File preparation	₩	

Teaching Plan - Chemistry Practical

10	Week 2	 To determine the strength of given Acetic acid potentiometrically. File preparation 		
	Week 3	 To determine the strength of given Mohr salt solution potentiometrically. File preparation 		
12	Week 4	 File checking Preparation of viva- voce from physical chemistry practical 	Viva-voce mock test 2	
13	May Week 1	 Introduction about Inorganic salt analysis To report the acid and basic radicals in the mixture. File preparation 		
14	Week 2	File checkingRevisionStudents doubts		

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Lesson Plan- Vector Calculus

Class: B.A/B.SC-I

Semester – (February–May 2023-2024)

Name of Teacher: Dr. Garima Kumari

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	February	Gradient of a scalar point		
	Week 1	function, Directional derivatives		
2	Week 2	Geometrical interpretation of		
		grad		
3	Week 3	Character of gradient		
4	Week 4	as a point function		
5	March	Divergence and curl of vector		
	Week 1	point function		
6	Week 2	Holi Vacation		
7	Week 3	Character of Div f and curl f as		
		point function		
8	Week 4	Example	Assignment I	
9	Week 5	Gradient divergence and curl of	Test I	
		sums and product		
10	April	Laplacian operator		
	Week 1			
11	Week 2	Orthogonal curvilinear		
		coordinates		
12	Week 3	Gradient, divergence, curl and		
		Laplacian		
13	Week 4	Cylindrical co-ordinates and	Assignment II	
		spherical co-ordinates		
14	May	Vector integration, Line	Test- II	
	Week 1	integral, Surface integral,		
		volume integral		

15	Week 2	Problem based on Theorems of	
		Gauss	
16		Green & Strokes	
	Week 3		
17	Week 4	Tracing of conics	
18	Week 5	Tangent at any point to the conic, chord of contact, pole of line to the conic, direction circle of conic	

LESSON PLAN – REAL ANALYSIS

Class: B.A/B.SC III

Semester – (February–May 2023-2024)

Name of Teacher: Dr. Garima Kumari

Sr.	Month	Topics to be covered	Academic Activity	Remark
No.				
1	September	Riemann integral		
	Week 2			
2	Week 3	Improper integral and their		
		convergence		
3	Week 4	Integral as a function of a		
		parameter		
4	October	metric spaces		
	Week 1			
5	Week 2	Open and closed sets in metric	Assignment I	
		spaces		
6	Week 3	Completeness in metric spaces	Test I	
7	Week 4	Diwali Vacation		
8	November	Exercise and Example		
	Week 1			
9		Continuity and unified,		
	Week 2	continuity in metric space		
10	Week 3	Exercise and Example		
11	Week 4	Compactness in metric spaces	Assignment II	
12	December	Metric Spaces	Test- II	
	Week 1			
13		Connectedness in Metric Spaces		
	Week 2			
14	Week 3	Short and type question		
	XX7 1 4	D ' '	1	1

15 Week 4 Revision ---