



Criterion II

Teaching Learning and Evaluation



2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution – Teaching Plan Samples



VIMALA COLLEGE (AUTONOMOUS), THRISSUR

Teaching Plan (2020-2021)

Name of Programme: MSc Chemistry

Semester and Course Name: III: MOLECULAR SPECTROSCOPY

Number of Credits and duration in hrs: Credits 4; Hours :72

	Course Plan
Bridge-in /Motivation/ Pre requisites	Basic knowledge of Spectroscopic techniques and its application in elucidating molecular structure
Learning Objective	<ol style="list-style-type: none"> 1) To Understand the basic fundamentals of microwave, IR, Raman, Electronic and ESR spectroscopy 2) To Analyse the NMR spectra of polyatomic molecules 3) To Analyse Nuclear Overhauser Effect in FTNMR spectroscopy 4) To Understand the basic principles and applications of Mossbauer spectroscopy 5) To Analyse the structure of organic compounds by spectrometric methods 6) To Understand the basic principles of EIMS and its application in structure determination

Week	Course content / module	Name of Instructor	Activities	Resources	Date (from to)	Remarks/ Strategies/methods to measure the attainment of course outcomes
1	Module 1- Basic Aspects and Microwave Spectroscopy	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	June 2020	Discussion Quiz
2	Module IV- Magnetic Resonance Spectroscopy – II	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	June 2020	Discussion Question answering, Examination



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3	Module 1- Basic Aspects and Microwave Spectroscopy	Jidha K S	Seminar,e- learning	Reference Books*, Google classroom code : t6eflxa	June 2020	Discussion Question answering
4	Module IV- Magnetic Resonance Spectroscopy – II	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	June 2020	Discussion Question answering
5	Module 1- Basic Aspects and Microwave Spectroscopy	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	June 2020	Discussion , Examination
6	Module IV- Magnetic Resonance Spectroscopy – II	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	June 2020	Question answering
7	Module 1- Basic Aspects and Microwave Spectroscopy	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	June 2020	Discussion
8	Module IV- Magnetic Resonance Spectroscopy – II	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Google classroom code : teflxa	June 2020	Discussion Question answering



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9	Module III- Magnetic Resonance Spectroscopy – I	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	July 2020	Discussion Examination
10	Module III- Magnetic Resonance Spectroscopy – I	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	July 2020	Discussion Question answering
11	Module III- Magnetic Resonance Spectroscopy – I	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	July 2020	Discussion Examination
12	Module III- Magnetic Resonance Spectroscopy – I	Jidha K S	Seminar, Present ation	Reference Books*, Google classroom code : t6eflxa	July 2020	Discussion Examination
13	Module V- Electronic & Vibrational Spectroscopy in Organic Chemistry	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	August 2020	Discussion
14	Module V- Electronic & Vibrational Spectroscopy in Organic Chemistry	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	August 2020	Discussion



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15	Module- Electronic & Vibrational Spectroscopy in Organic Chemistry	Susan Samuel	e-learning	Reference Books*, Reference Books*class code : 4wXNHk	August 2020	Discussion Examination
16	Module V- Electronic & Vibrational Spectroscopy in Organic Chemistry	Susan Samuel	Seminar presentation	Reference Books*, Reference Books*class code : 4wXNHk	August 2020	Discussion
17	Module VI- NMR Spectroscopy in Organic Chemistry - I	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	August 2020	Discussion Examination
18	Module - VIII- Mass Spectrometry and Spectroscopy for Structure Elucidation	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	Septemb er 2020	Discussion Question answering
19	Module VI- NMR Spectroscopy in Organic Chemistry - I	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	Septemb er 2020	Discussion Examination
20	Module VIII- Mass Spectrometry and Spectroscopy for Structure Elucidation	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	Septemb er 2020	Discussion Examination
21	Module VI- NMR Spectroscopy in Organic Chemistry - I	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Reference Books*class code : 4wXNHk	Septemb er 2020	Discussion Question answering



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22	Module VIII- Mass Spectrometry and Spectroscopy for Structure Elucidation	Jidha K S	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, Google classroom code : t6eflxa	September 2020	Discussion
23	Module VI- NMR Spectroscopy in Organic Chemistry - I	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*class code : 4wXNHk	September 2020	Discussion Question answering
24	Module VIII- Mass Spectrometry and Spectroscopy for Structure Elucidation	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	September 2020	Discussion Examination
25	Module II- Infrared, Raman and Electronic Spectroscopy	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	Reference Books*, class code : 4wXNHk	October 2020	Discussion
26	Module VII- NMR Spectroscopy in Organic Chemistry - II	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Reference Books*, Google classroom code : t6eflxa	October 2020	Discussion Examination
27	Module II- Infrared, Raman and Electronic Spectroscopy	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	class code : 4wXNHk	October 2020	Question answering
28	Module VII NMR Spectroscopy in Organic Chemistry – II	Jidha K S	Online classes through Zoom and participatory learning Zoom id:3ZYCxu	Google classroom code : t6eflxa	October 2020	Quiz, Discussion



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29	Module II- Infrared, Raman and Electronic Spectroscopy	Susan Samuel	Online classes through Zoom and participatory learning Zoom id : 4wXNHk	class code : 4wXNHk	October 2020	Discussion
30	Module VII- NMR Spectroscopy in Organic Chemistry - II	Jidha K S	Seminar	Google classroom code : t6eflxa	October 2020	Discussion Examination
31	Module II- Infrared, Raman and Electronic Spectroscopy	Susan Samuel	seminar	Reference Books*, class code : 4wXNHk	October 2020	Question answering
32	Module VII- NMR Spectroscopy in Organic Chemistry - II	Jidha K S	Presentation, Seminar	Reference Books*, Google classroom code : t6eflxa	October 2020	Quiz, Discus sion

Name and Signature of Teachers

1. Susan Samuel

2. Jidha K S

Signature of HoD



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Teaching Plan (2020-2021)

Name of Programme: BSc Chemistry

Semester and Course Name: I, Theoretical and Inorganic Chemistry 1

Number of Credits and duration in hrs: Credits 2; Hours 32

	Course Plan
Bridge-in /Motivation/ Pre requisites	<ul style="list-style-type: none"> • Evolution of Chemistry, Scope of Chemistry, Branches of Chemistry • Health hazard associated with Chemicals • Name and Symbol of Elements • Elementary idea about acid and bases • Elementary idea about pollution
Learning Objective	<ul style="list-style-type: none"> ✓ To understand various steps in scientific research ✓ To familiarize with project preparation and presentation ✓ To understand various types of volumetric titrations ✓ To understand various periodic properties ✓ To explore various acids base concepts ✓ To explore various types of environmental pollution, adverse effects and control measures

Week	Course content / module	Name of Instructor	Activities	Resources	Date (from to)	Remarks/ Strategies/ methods to measure the attainment of course outcomes
1.	Module I Chemistry as a Disciple of Science <i>[What is Science]</i>	Dr. Jiji Abraham	1 hour - introduction of course outcome, Discussion	Text books* Google class room- Class code Lxvq2p6	September	Discussion Question answering
	Module II: Analytical Principles -I <i>[Laboratory Hygiene and Safety]</i>	Dr Nimmy Kuriakose	Online classes through google meet & participatory learning	Reference books* Google class room- Class code Lxvq2p6	September	Discussion



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2.	Module I Chemistry as a Disciple of Science <i>[Scientific Method]</i>	Dr. Jiji Abraham	Online class, Discussion	Reference books* Google classroom- Class code Lxvq2p6	September	Question answering
	Module II: Analytical Principles -I <i>[Laboratory Hygiene and Safety]</i>	Dr Nimmy Kuriakose	e-learning	Reference books* Google classroom- Class code Lxvq2p6	September	Discussion & Assignment
3.	Module I Chemistry as a Disciple of Science <i>[Research Design]</i>	Dr. Jiji Abraham	Online class, Presentations	Reference books* Google classroom- Class code * Lxvq2p6	September-October	Discussion
	Module II: Analytical Principles -I <i>[Laboratory Practises]</i>	Dr Nimmy Kuriakose	e-learning	Reference books* Google classroom- Class code Lxvq2p6	September-October	Interaction with students & student presentations
4.	Module I Chemistry as a Disciple of Science <i>[Data Analysis]</i>	Dr. Jiji Abraham	Online class	Reference books* Google classroom- Class code Lxvq2p6	October	Interaction with students & student presentations
	Module II: Analytical Principles -I <i>[Accuracy, Precision, Types of errors]</i>	Dr Nimmy Kuriakose	Online class	Reference books* Google classroom- Class code Lxvq2p6	October	Quiz & student presentations



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5	Module I Chemistry as a Disciple of Science <i>[Publishing a research work]</i>	Dr. Jiji Abraham	Online class, Presentations	Reference books* Google classroom- Class code Lxvq2p6	October	Discussion
	Module II: Analytical Principals -I <i>[Methods of expressing precession]</i>	Dr Nimmy Kuriakose	Online class	Reference books* Google classroom- Class code Lxvq2p6	October	Group discussion & student presentation
6	Module I Chemistry as a Disciple of Science <i>[Publishers]</i>	Dr. Jiji Abraham	Online class, Presentations	Reference books* Google classroom- Class code Lxvq2p6	October	Discussion
	Module II: Analytical Principals -I <i>[Volumetric Analysis]</i>	Dr Nimmy Kuriakose	e- learning	Reference books* Google classroom- Class code Lxvq2p6	October	Quiz & Discussion
7	Module V: Environmental Pollution <i>[Air Pollution due to oxides of C, N, S]</i>	Dr. Jiji Abraham	Online class, Presentations	Reference books* Google classroom- Class code Lxvq2p6	October	Examination, Discussion
	Module II: Analytical Principals -I <i>[Acid- Base Titrations]</i>	Dr Nimmy Kuriakose	2 hrs online class	Reference books* Google classroom- Class code Lxvq2p6	October	Examination, Discussion



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8	Module V: Environmental Pollution <i>[Acid Rain, Green House effect]</i>	Dr. Jiji Abraham	Online class, Presentatio ns	Referen ce books* Google class room- Class code Lxvq2p6	November	Discussion
	Module II: Analytical Principals -I <i>[Dichrometry and Permanganometry]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	November	Quiz & student presentation
9	Module V: Environmental Pollution <i>[Ozone layer depletion]</i>	Dr. Jiji Abraham	Online class, Presentatio ns	Referen ce books* Google class room- Class code Lxvq2p6	November	Discussion
	Module II: Analytical Principals -I <i>[Indicators]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	November	Quiz & discussion
10	Module V: Environmental Pollution <i>[Causes of water pollution]</i>	Dr. Jiji Abraham	Online class, Presentatio ns	Referen ce books* Google class room- Class code Lxvq2p6	November	Solving the mechanism
	Module II: Analytical Principals -I <i>[Theory of Indicators]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	November	Quiz & student presentation



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11	Module V: Environmental Pollution <i>[Quality of Drinking water]]</i>	Dr. Jiji Abraham	Online class, Presentatio ns	Referen ce books* Google class room- Class code Lxvq2p6	November	Question answering
	Module II: Analytical Principals –I <i>[Double Burette Method]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	November	Interaction with students
12	Module V: Environmental Pollution <i>[Water quality parameters]</i>	Dr. Jiji Abraham	Online class, Presentatio ns	Referen ce books* Google class room- Class code Lxvq2p6	December	Discussion
	Module III: Periodic Properties <i>[Ionization Enthalpy, Electron affinity]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	December	Quiz & student presentation
13	Module V: Environmental Pollution <i>[Toxic metals in water]</i>	Dr. Jiji Abraham	Online class, Student Presentati ons	Referen ce books* Google class room- Class code Lxvq2p6	December	Discussion
	Module III: Periodic Properties <i>[Electronegativity]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referen ce books* Google class room- Class code Lxvq2p6	December	Quiz & student presentation



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14	Module V: Environmental Pollution <i>[Radioactive Pollution]</i>	Dr. Jiji Abraham	Online class, Student Presentati ons	Referenc e books* Google class room- Class code Lxvq2p6	December	Discussion
	Module III: Periodic Properties <i>[Effective Nuclear charge]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referenc e books* Google class room- Class code Lxvq2p6	December	Interaction with students
Christmas Vacation						
15	Module V: Environmental Pollution <i>[Thermal Pollution]</i>	Dr. Jiji Abraham	Online class, Presentations	Referen ce books* Google class room- Class code Lxvq2p6	January	Examination, Discussion
	Module IV: Acid Base Concept <i>[Lux-Flood Concept, Solvent system concept]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referenc e books* Google class room- Class code Lxvq2p6	January	Quiz & student presentation
16	Module V: Environmental Pollution <i>[Noise Pollution]</i>	Dr. Jiji Abraham	Online class, Presentations	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion
	Module IV: Acid Base Concept <i>[Usanovich concept]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion



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17	Module V: Environmental Pollution <i>[Thermometric titrations and applications]</i>	Dr. Jiji Abraham	Online class, Presentations	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion
	Module IV: Acid Base Concept <i>[Metal and non- metal hydroxyl compounds]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion
18	Module V: Environmental Pollution <i>[Nagasaki and Chernobyl accident, Local environment movement]</i>	Dr. Jiji Abraham	Online class, Presentations	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion
	Module IV: Acid Base Concept <i>[Acid Anhydrides]</i>	Dr Nimmy Kuriakose	2 hrs online class	Referenc e books* Google class room- Class code Lxvq2p6	January	Discussion

Name and Signature of Teachers

1. Dr. Nimmy Kuriakose

2. Dr. Jiji Abraham

Signature of HoD



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Vimala College (Autonomous), Thrissur

Teaching Plan 2016-17

Name of the Faculty: Dr Sitara V Attokkaran

Department: Economics

Programme: S3 MA

Course with Code: XI ECO3C11 BANKING: THEORY AND PRACTICE (III Sem MA Economics)

Course Outcomes:

- Knowledge about the structure and functions of central bank
- Theoretical and practical knowledge about policies of Reserve Bank of India
- An understanding about specialized financial and investment institutions
- An awareness on the banking sector reforms in India since 1991
- An understanding about international banking and multinational banking
- Knowledge about the structure and functions of commercial banks
- Knowledge about the structure and functions of cooperative banks

Date	Week	Learning Objectives	Teaching-learning Strategies and resources/materials
1/6/2016 to 30/6/2016	1	Structure and functions of central banks-Federal Reserve System-Bank of England-European Central Bank	Lecture Reading materials Discussion
	2	Reserve Bank of India	
	3	Monetary policy-Objectives and instruments-Liquidity management - Autonomy of the RBI	
	4	Monetary sector reforms in India since 1991-monetary and credit policy of RBI –Impact of RBI's monetary policy on economic growth and inflation.	
1/7/2016 to 31/7/2016	1	Development financial institutions (IFCI, IDBI, IIBI, SIDBI)	Lecture Reading materials
	2	Specialized financial institutions (EXIM Bank-National Housing Bank – NABARD, MUDRA bank)	



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	3	Specialized investment institutions (Pension funds-Hedge funds-Mutual funds-UTI)	
	4	Non Banking Financial Companies-Investment banks-Merchant banks. ICICI, Provident Fund.	
1/8/2016 to 31/8/2016	1	Context, need and objectives of banking Sector Reforms in India Since 1991	Lecture Reading materials Discussion
	2	Implementations of the Narsimham Committee recommendations	
	3	Priority sector lending-Asset classification-Non-performing assets-Capital adequacy norms-Regulation of the banking sector	
	4	Board for Financial Supervision-Credit Information Bureau of India Limited (CIBIL)-Banking Ombudsman.	
1/9/2016 to 30/9/2016	1	International banking-Reasons for the growth of international banking	Lecture Reading materials
	2	Off shore banking-Multinational banking-Bank for International Settlements (BIS)	
	3	World Bank-Asian Development Bank	
	4	New Development Bank (BRICS bank).	
1/10/2016 to 31/10/2016	1	Structure of commercial banks-Public sector banks-Private sector banks-New generation banks-Foreign banks	Lecture Reading materials Discussion
	2	Functions of commercial banks-Commercial banks and credit creation-Branch expansion programme and policy-Deposit mobilization and sectoral allocation of bank credits	
	3	Priority sector lending-Social banking-Lead bank scheme-Cooperative banks-Central cooperative banks-State cooperative banks	
	4	Land development banks-Regional rural banks. Financial inclusion initiatives.	

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