

TURA GOVERNMENT COLLEGE
DEPARTMENT OF CHEMISTRY
DISTRIBUTION OF SYLLABUS FOR THE YEAR 2018-2019

FIRST SEMESTER

Chem EH 101 Part A-THEORY
SECTION I (INORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Bithingkon G. Momin	I	(a) Structure of Atom
2. Smti Lisa Valerie K. Marak	I	(b) Nucleus and Radioactivity-I (c) Chemical Periodicity
3. Shri Bithingkon G. Momin	II	(a) Covalent Bonding (b) Ionic Bonding (c) Bonding in Metals, Semiconductors and Hydrogen Bond

SECTION II (ORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE TEACHER
1. Dr. Kiewshaphrang Kharnaor	III	(a) Structure, Bonding & Properties (b) Organic Stereochemistry-I
2. Shri Isaac W. Momin	IV	(a) Alkanes and Cycloalkanes
3. Shri Bithingkon G. Momin	IV	(b) Alkenes and Alkynes
4. Shri Isaac W. Momin	IV	(c) Aromatic Hydrocarbons and Aromaticity

SECTION III (PHYSICAL)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Dr. Kiewshaphrang Kharnaor	V	(a) Gaseous State-I (b) Liquid State-I
2. Smti Donme L. A. Sangma	VI	(a) Crystalline State-I (b) Colloids

Chem EH 101 Part B- PRACTICAL
LABORATORY COURSE (ORGANIC)

NAME OF THE TEACHERS:	1. Shri Isaac W. Momin
	2. Dr. Kiewshaphrang Kharnaor

SECOND SEMESTER

Chem EH 201 Part A- THEORY
SECTION I (INORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Bithingkon G. Momin	I	(a) Principles of Qualitative and Quantitative Analysis
2. Smti Lisa Valerie K. Marak	I	(b) Acid-Base Concept
	II	(a) Redox Reactions

		(b) Some Concepts of Metallurgy
3. Shri Bithingkon G. Momin	II	(c) Industrial Chemistry

SECTION I (ORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE TEACHER
1. Dr. Kiewshaphrang Kharnaio	III	(a) Nucleophilic Substitution Reactions
2. Shri Isaac W. Momin	III	(b) Elimination Reactions (c) Alkyl Halides (d) Aromatic Halogen Compounds
3. Shri Isaac W. Momin	IV	(a) Alcohols (b) Phenols (c) Aldehydes and Ketones

SECTION III (PHYSICAL)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Dr. Kiewshaphrang Kharnaio	V	(a) Thermodynamics-I (b) Macromolecules
2. Smti Donme L. A. Sangma	VI	(a) Thermochemistry (b) Adsorption and Surface Phenomena

Chem EH 201 Part B- PRACTICAL
LABORATORY COURSE (PHYSICAL)

NAME OF THE TEACHERS:	1. Smti Donme L. A. Sangma
	2. Smti Lisa Valerie K. Marak

THIRD SEMSESTER**Chem EH 301 Part A-THEORY****SECTION I (INORGANIC)**

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Smti Lisa Valerie K. Marak	I	s- and p-Block Elements and Their Compounds
2. Shri Bithingkon G. Momin	II	d- and f-Block Elements
	III	Coordination Compounds

SECTION II (ORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Isaac W. Momin	IV	(a) Carboxylic Acids and Their Derivatives (b) Organometallic Compounds-I (c) Active Methylene Compounds

2. Shri Isaac W. Momin	V	(a) Nitro Compounds (Aliphatic and Aromatic) (b) Amines (Aliphatic and Aromatic) (c) Diazo Compounds
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SECTION III (PHYSICAL)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Dr. Kiewshaphrang Kharnaor	VI	(a) Thermodynamics-II (b) Chemical Equilibrium
2. Smti Donme L. A. Sangma	VII	(a) Chemical Kinetics-I (b) Dilute Solutions

Chem EH 301 Part B-PRACTICAL
LABORATORY COURSE (INORGANIC-I)

NAME OF THE TEACHERS:	1. Shri Bithingkon G. Momin
	2. Smti Lisa Valerie K Marak

FOURTH SEMESTER

Chem EH 401 Part A- THEORY
SECTION I (INORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Bithingkon G. Momin	I	(a) Organometallic Chemistry-I (b) Inorganic Polymers (c) Interhalogens, Polyhalides and Pseudohalides
2. Smti Lisa Valerie K. Marak	II	(a) Earth's Atmosphere (b) Waste-Water Treatment (c) Solid Waste Disposal (d) Radioactive Waste

SECTION II (ORGANIC)

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Dr. Kiewshaphrang Kharnaor	III	(a) Carbohydrates-I (b) Amino Acids
2. Shri Isaac W. Momin	III	(c) Urea
3. Shri Bithingkon G. Momin	III	(d) Drugs
4. Shri Isaac W. Momin	IV	(a) Heterocyclic Compounds-I
5. Smti Lisa Valerie K Marak	IV	(b) Fats, Oils, Soaps and Detergents
6. Shri Isaac W. Momin	IV	(c) Dyes

SECTION III (PHYSICAL)

NAME OF THE TEACHER	UNIT	NAME OF TEACHER
1. Dr. Kiewshaphrang Kharnaor	V	(a) Ionic Equilibrium (b) Electrochemistry-I
2. Smti Donme L. A. Sangma	VI	(a) Electrochemistry-II (b) Phase Equilibria

Chem EH 401 Part B-PRACTICAL
LABORATORY COURSE (INORGANIC-II)

NAME OF THE TEACHERS:	1. Shri Bithingkon G. Momin
	2. Smti Lisa Valerie K Marak

FIFTH SEMESTER

Chem H 501
PART A-INORGANIC THEORY

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Bithingkon G. Momin	I	(a) Molecular Symmetry (b) Error Analysis
	II	(a) Complexometric Titration (b) Organic Reagents in Inorganic Analysis
2. Smti Lisa Valerie K. Marak	III	Nucleus and Radioactivity-II
	IV	Crystal Field Theory (CFT)
	V	Magnetochemistry

PART B- ORGANIC THEORY

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Isaac W. Momin	I	(a) Organic Acids and Bases (b) Polynuclear Aromatic Hydrocarbons
2. Dr. Kiewshaphrang Kharnaio	II	(a) Organic Stereochemistry-II
3. Lisa Valerie K. Marak	II	(b) Introduction to Dienes (c) Polymers
4. Shri Isaac W. Momin	III	(a) Introduction to Organic Synthesis (b) Rearrangements
5. Lisa Valerie K. Marak	III	(c) Inorganic Reagents in Organic Synthesis
6. Shri Isaac W. Momin	IV	(a) Heterocyclic Compounds-II (b) Green Chemistry (c) Interconversions

Chem H 502
PART A- PHYSICAL THEORY

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Dr. Kiewshaphrang Kharnaio	I	Gaseous State-II
2. Smti Donme L. A. Sangma	II	Liquid State-II
3. Smti Donme L. A. Sangma	III	Crystalline State-II
4. Dr. Kiewshaphrang Kharnaio	IV	Thermodynamics-III

5. Smti Donme L.A. Sangma	V	Chemical Kinetics-II
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Chem H 502
PART B- PRACTICAL
LABORATORY COURSE (ORGANIC)

NAME OF THE TEACHERS:	1. Shri Isaac W. Momin
	2. Dr. Kiewshaphrang Kharnaioir

Chem H 502
PART C- PRACTICAL
LABORATORY COURSE (PHYSICAL)

NAME OF THE TEACHERS:	1. Smti Donme L. A. Sangma
	2. Smti Lisa Valerie K. Marak

SIXTH SEMESTER

Chem H 601
PART A- INORGANIC THEORY

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Bithingkon G. Momin	I	Organometallic Chemistry-II
	II	Bioinorganic Chemistry
2. Smti Lisa Valerie K. Marak	III	Spectroscopic Methods in Inorganic Chemistry
	IV	Reactivity of Coordination Compounds
	V	Nanomaterials

PART B- ORGANIC THEORY

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1. Shri Isaac W. Momin	I	(a) Carbohydrates-II (b) Natural Products
2. Shri Bithingkon G. Momin	II	(a) Peptides, Proteins and Vitamins (b) Topics in Biological Chemistry
3. Shri Isaac W. Momin	III	(a) Organic Photochemistry (b) Pericyclic Reactions
4. Smti Lisa Valerie K. Marak	IV	(a) Mass Spectrometry (b) Ultraviolet and Visible Spectroscopy
5. Dr. Kiewshaphrang Kharnaioir	IV	(d) Nuclear Magnetic Resonance Spectroscopy

Chem H 602**PART A- PHYSICAL THEORY**

NAME OF THE TEACHER	UNIT	NAME OF THE UNIT
1.Dr. Kiewshaphrang Kharnaio	I	Boltzmann Distribution
2.Dr. Kiewshaphrang Kharnaio	II	Elementary Quantum Mechanics
3.Dr. Kiewshaphrang Kharnaio	III	Molecular Spectroscopy
4.Smti Donme L. A. Sangma	IV	Photochemistry
5.Smti Donme L. A. Sangma	V	Electrochemistry-III

Chem H 602**PART B- PRACTICAL****LABORATORY COURSE (INORGANIC)**

NAME OF THE TEACHERS:	1. Shri Bithingkon G. Momin
	2. Smti Lisa Valerie K Marak

Chem H 602**PART C- SEMINAR**