



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Syllabus Planner for the academic year 2020 - 21

TERM: FIRST TERM

TEACHER'S NAME: MR. ARNAB PAUL CHOWDHURY

No. of working days: 20

No. of periods available: 02

Subject: CHEMISTRY

CLASS: 11

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY					
FEBRUARY					
MARCH					
APRIL	02	Some Basic Concept of Chemistry	Mole concept, Eudiometry, Stoichiometry, Concept of equivalent mass, Concept of different types of concentration terms i.e. Molarity, Normality, Molality, Mole fraction, Formality and numerical problems based on them.	Numerical, reasoning based questions and MCQ would be given as homework.(Question pattern in accordance to WBCHSE)	The marks distribution of the WBCHSE council for the relevant chapter and model question-answer would be discussed. Road map problems and conceptual questions would be solved.(Ref: Test papers and previous years WBCHSE question papers)

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Signature of the Teacher:

Arnab Paul Chowdhury 27.01.2020

Submitted on: 27.01.2020

PRINCIPAL

Academic Co-ordinator:

J. Steyer 28/1/2020

VICE PRINCIPAL

Z. Amal
28/2/2020



ST. LAWRENCE HIGH SCHOOL

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Syllabus Planner for the academic year 2020 - 21

TERM: FIRST TERM and PRE-ANNUAL

TEACHER'S NAME: MR. ARNAB PAUL CHOWDHURY

No. of working days: 70

No. of periods available: 43

Subject: CHEMISTRY

CLASS: 11

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
MAY	08	Some Basic Concept of Chemistry(Continue) Redox Equilibria	Mole concept, Eudiometry, Stoichiometry, Concept of equivalent mass, Concept of different types of concentration terms i.e. Molarity, Normality, Molality, Mole fraction, Formality and numerical problems based on them. Concept of oxidation state, Determination of O.N., balancing chemical equation by Oxidation Number method and Ion electron method(in acidic, basic and neutral medium)	Numerical, reasoning based questions and MCQ would be given as homework.(Question pattern in accordance to WBCHSE)	Methodology for writing stoichiometric equation and solving mole based questions, numerical based on concept of strength would be discussed(Ref: Test papers and previous years WBCHSE question papers)
JUNE	08	Structure of Atom and Periodic Table	Rutherford's atomic model and rectifications being made by Neil's Bohr, concept of Quantisation, Sommerfeld's model, Bohr model, Photoelectric effect, Atomic spectra, Wave particle dualism, Concept of quantum numbers, writing electronic configuration, Schrodinger wave equation(Elementary idea) Development of periodic table, periodic laws, discussion on Periodic properties in detail.	Numerical based on Atomic structure from different aspects and assignments related to the arrangement of periodic properties in order should be discussed.	Calculation involving atomic spectral lines, De- Broglie hypothesis, Heisenberg's uncertainty principle, quantum numbers etc. Conceptual question answers on periodic properties. (Ref: Test papers and previous years WBCHSE question papers)
JULY	19	Chemical Bonding and States of Matter	Basic covalent bonding theories like Kossel-Lewis model, VSEPR theory, Molecular Orbital Theory(MOT), Ionic bond and Lattice energy, Fajan's rule, Concept of dipole moment and hydrogen bonding. Gas laws (Boyle's law, Charles Law, Amagat's law, Graham's law of diffusion, Dalton's law) Numerical based on gas laws, Ideal gas equation, Real gases, and Van der waals equation of real gases, Concept of critical constants, Andrew's graph and Amagat's graph.	Numerical, reasoning based questions and MCQ would be given as homework.(Question pattern in accordance to WBCHSE)	Numerical and conceptual question-answer, analytical questions based on WBCHSE pattern. NOTE: Revision for 1 st Term examination. (Ref: Test papers and previous years WBCHSE question papers)
AUGUST	08	1 st TERM EXAMINATION STARTS FROM 3 RD AUGUST' 2020 SYLLABUS: THE TOPICS COVERED UP TO JULY Thermodynamics and Chemical Equilibria and Ionic Equilibria	Thermodynamic Laws(1 st , 2 nd , 3 rd and Zeroth law), numerical based of First law of thermodynamics, Hess's Law(numerical), Numerical based on second law of thermodynamics, Gibb's free energy change and spontaneity of a chemical process Concept of chemical equilibrium, Equilibrium constants(K_w , K_c and K_p), numerical based on equilibrium constant, Le-Chatelier's principle and effect of different external parameters on the state of equilibrium; Concept of ionic equilibrium, theory of acids and bases, pH scale, Buffer solution, Common ion effect, Theory of indicators, salt hydrolysis, Solubility Product.	Numerical, reasoning based questions and MCQ would be given as homework.(Question pattern in accordance to WBCHSE)	Numerical and conceptual question-answer, analytical questions based on WBCHSE pattern. (Ref: Test papers and previous years WBCHSE question papers)

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Signature of the Teacher: *Arnab Paul Chowdhury* 27.01.2020

Submitted on: 27.01.2020

PRINCIPAL

Academic Co-ordinator: *J. Steyer* 28/1/2020

VICE PRINCIPAL

Arnab Paul Chowdhury
28/1/2020



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Syllabus Planner for the academic year 2020 - 21

TERM: PRE-ANNUAL

TEACHER'S NAME: MR. ARNAB PAUL CHOWDHURY

No. of working days: 58

No. of periods available: 53

Subject: CHEMISTRY

CLASS: 11

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
SEPTEMBER	17	General Organic Chemistry(GOC), Isolation and principle of estimation of organic compounds and Isomerism(Structural and Stereo chemical)	IUPAC nomenclature, Isomerism related to Organic chemistry, Electronic effects, stability order among reactive intermediates, Organic qualitative and quantitative analysis.	Problems based on IUPAC nomenclature, solving MCQ and conceptual reasoning based question answers based on electronic effects.	Solving conceptual question-answer, analytical questions on electronic effects, isomerism based on WBCHSE pattern. (Ref: Test papers and previous years WBCHSE question papers)
OCTOBER	10	S-Block elements-Block elements(Groups: 13,14), Hydrogen	General group trends, relativities of oxide, chloride, nitrates and sulphates of s- block elements, Special emphasis on Inert pair effect and Fajan's rule, allotropy, chemical study on Hydrogen peroxide, Water, hardness of water, strength of hydrogen peroxide and thorough group study of P-block elements(Group number 13/14).	Problems based on comparative study of group properties, solving MCQ and conceptual reasoning based question answers based on hydrocarbons, numerical from hardness of water and strength of hydrogen peroxide.	Solving conceptual question-answer, organic conversions, analytical questions on electronic effects, isomerism based on WBCHSE pattern. (Ref: Test papers and previous years WBCHSE question papers)
NOVEMBER	16	Hydrocarbon(Continue) and Environmental Chemistry NOTE: The entire syllabus would be completed by 27 th November' 2020	Basic idea of hydrocarbons, synthesis, physical properties and chemical reactions of alkane, alkene and alkyne. Aromaticity and chemistry of benzene, its preparations, properties and chemical equations, special emphasis on different types of Aromatic electrophilic substitution reactions. Primary and secondary pollutants, Greenhouse effect, Global warming, Photochemical smog and Los-Angeles smog, Water pollution, Eutrophication	Problems based on hydrocarbons, solving MCQ and conceptual reasoning based question answers based on hydrocarbons.	Solving conceptual question-answer, organic conversions, analytical questions on electronic effects, isomerism based on WBCHSE pattern. (Ref: Test papers and previous years WBCHSE question papers)
DECEMBER	10	Revision	Revision(Discussion of model question-answer, previous years' question papers)	Revision(Discussion of model question-answer, previous years' question papers)	Revision(Discussion of model question-answer, previous years' question papers)

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Signature of the Teacher:

Arnab Paul Chowdhury 27.01.2020

Submitted on: 27.01.2020

PRINCIPAL

Academic Co-ordinator:

J. Sharpe 28/1/2020

VICE PRINCIPAL

Arnab Paul Chowdhury
28/2/2020



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Syllabus Planner for the academic year 2021

No. of working days: 20

TERM: PRE-ANNUAL

No. of periods available: 04

TEACHER'S NAME: MR. ARNAB PAUL CHOWDHURY

Subject: CHEMISTRY

CLASS: 11

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY	04	PRE-ANNUAL EXAMINATION-2021 <u>SYLLABUS: THE ENTIRE CLASS 11 SYLLABUS</u>	Revision(Discussion of model question-answer, previous years' question papers)	Revision(Discussion of model question-answer, previous years' question papers)	Revision(Discussion of model question-answer, previous years' question papers)
FEBRUARY					
MARCH					
APRIL					

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Signature of the Teacher:

Arnab Paul Chowdhury
27.01.2020

Submitted on: 27.01.2020

PRINCIPAL

Academic Co-ordinator:

J. Sanyal 28/1/2020

VICE PRINCIPAL

Arnab Paul Chowdhury
28/1/2020