



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Syllabus Planner for the year 2019

TERM: PRE-SELECTION

TEACHER'S NAME: Mr. ARNAB PAUL CHOWDHURY & MRS. RUMELI DASGUPTA

No. of working days: 04

No. of periods available: 01

Subject: CHEMISTRY

CLASS: 12

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY					
FEBRUARY					
MARCH					
APRIL	01	Haloalkane,haloarene,Alcohol, Phenol and Ether	Synthesis of halo alkane, halo arene, phenol and ether; properties of them and different chemical reactions, identification tests, distinguishing methods, conceptual Council based questions would be discussed thoroughly.	WBCHSE level conversions, mechanism based problems would be given for homework.	The marks distribution of the WBCHSE council for the relevant chapter and model question-answer would be discussed. Conversions, Road map problems and conceptual mechanism based 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.

PRINCIPAL

Submitted on... 28.01.19

Signature of Teacher: *Rumeli Dasgupta*

ACADEMIC CO-ORDINATOR:
Susmita Banerjee
29/1/19.
St. Lawrence High School

[Signature]
VICE PRINCIPAL



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Syllabus Planner for the year 2019

TERM: SELECTION

TEACHER'S NAME: Mr. ARNAB PAUL CHOWDHURY & MRS. RUMELI DASGUPTA

No. of working days: 70

No. of periods available: 47

Subject: CHEMISTRY

CLASS: 12

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
MAY	06	Haloalkane, haloarene, Alcohol, Phenol and Ether, Solution	Synthesis of halo alkane, halo arene, phenol and ether; properties of them and different chemical reactions, identification tests, distinguishing methods, conceptual Council based questions would be discussed thoroughly. Solution chapter would be discussed with numerical, graphical explanation and conceptual question-answer.	WBCHSE level conversions, mechanism based problems would be given for homework. The Council based project would be given to the students before the summer vacation. Proper guidance would be shared in detail. PROJECT ASSIGNMENT WILL BE GIVEN BY 11TH MAY, 2019.	The marks distribution of the WBCHSE council for the relevant chapter and model question-answer would be discussed. Conversions, Road map problems and conceptual mechanism based questions would be solved. (Ref: Test papers and previous years WBCHSE question papers)
JUNE	12	Chemical Kinetics and Electrochemistry	Measurement of reaction rate, Law of mass action, experimental rate law, Order and molecularity, integrated rate expression for zero, 1 st , 2 nd and n th order reactions, variation of reaction rate with temperature, Arrhenius equation. Electrolysis and Faraday's law, Concept of electrode potential and Nernst equation, commercial cell, Concept of equivalent and molar conductance and their variations with concentration, Kohlrausch's law and determination of dissociation constants of weak acids.	Numerical, reasoning based questions and MCQ would be given as homework. (Question pattern in accordance to WBCHSE)	Problems on conductance measurement, determination of electrolysis products, calculation of cell potential based questions, numerical based of Faraday's Law would be discussed in accordance to WBCHSE. (Ref: Test papers and previous years WBCHSE question papers) THE LAST DATE FOR SUBMISSION OF WBCHSE LAB BASED SUBJECT PROJECT BY 27TH JUNE, 2019.
JULY	14	Aldehyde, Ketone, Carboxylic acid, Organic compounds containing Nitrogen and P-Block elements Pre-selection examination starts from 29 th July' 2019. Syllabus: The topics covered up to July	Synthesis, Physical properties, Chemical reactions and identification tests for carbonyl compounds, carboxylic acid, and amines would be discussed thoroughly. A comparative study based on inorganic group chemistry of group number 15/16/17/18 would be discussed along with structures, special features and conceptual questions would be discussed.	WBCHSE level conversions, mechanism based problems would be given for homework assignment.	The marks distribution of the WBCHSE council for the relevant chapter and model question-answer would be discussed. Conversions, Road map problems and conceptual mechanism based questions would be solved. (Ref: Test papers and previous years WBCHSE question papers)
AUGUST	15	Solid state, d and f Block elements and Coordination compounds	Introduction to unit cell, Bravais lattice, different types of cells, Packing fraction for simple cubic cell, FCC, BCC, HCP, density calculation, crystal defects, Radius ratio, magnetic properties would be discussed. A comparative study based on d and f block elements would be discussed thoroughly along with emphasis on special important topics. Coordination chemistry would be discussed with emphasis on all topics related to it.	Numerical, reasoning based questions and MCQ would be given as homework. (Question pattern in accordance to WBCHSE)	Conceptual question-answer based on unit cell formula calculation, density, void calculation, crystal defects would be discussed. Important structures, Warner's theory, VBT, Isomerism, IUPAC nomenclature, metal carbonyl compounds based on coordination compounds would be discussed. WBCHSE pattern question answer would be discussed. (Ref: Test papers and previous years WBCHSE question papers)

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Submitted on: 28.01.19

Signature of Teacher:

Arnob Paul Chowdhury
Rumeli Dasgupta

ACADEMIC CO-ORDINATOR
Susmita Dasgupta
29.1.19

St. Lawrence High School

VICE PRINCIPAL

Rumeli Dasgupta



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Syllabus Planner for the year 2019

TERM: SELECTION

TEACHER'S NAME: Mr. ARNAB PAUL CHOWDHURY & MRS. RUMELI DASGUPTA

No. of working days: 55

No. of periods available: 29

Subject: CHEMISTRY

CLASS: 12

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
SEPTEMBER	14	Polymers, Biomolecules and Surface Chemistry	Classification of polymers based on source, structure and the nature of intermolecular forces; monomeric units and polymeric structures of Nylon family, Polyester resins, Rubbers and polyolefin. Structures, nature and important chemical reactions (Ref: Isoelectric pH, Zwitterion, Mutarotaion, Inversion of cane sugar, peptide linkage, formula and structure of essential amino acids etc.) of Carbohydrate and amino acids. Special properties of Vitamins, Enzyme, Nucleic acids along with structural orientation.	Numerical, reasoning based questions and MCQ would be given as homework.(Question pattern in accordance to WBCHSE) NOTE: Revision of the entire syllabus in accordance to WBCHSE for the selection examination.	The marks distribution of the WBCHSE council for the relevant chapter and model question-answer would be discussed. Conversions, identification tests, Road map problems and conceptual mechanism based questions would be solved. (Ref: Test papers and previous years WBCHSE question papers)
OCTOBER	08	General Principles and processes of isolation of elements and Chemistry in everyday life	Minerals, ores, extraction, purification and refining processes involved in metallurgy, Metallurgical study of Cu/Ag/Au/Al/Fe/Zn. Special topics on metallurgy.	Reasoning based questions, flowchart, chemical reactions involved and MCQ would be given as homework.(Question pattern in accordance to WBCHSE) NOTE: Revision of the entire syllabus in accordance to WBCHSE for the selection examination.	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)
NOVEMBER	07	Chemistry in everyday life Selection Examination begins from <u>15th November' 2019</u>	Name and structures of common antibiotics, analgesics, tranquilisers, artificial sweeteners, food preservatives, anti-oxidants, soaps, disinfectants and antiseptics etc. and their application in our day to day life.	Reasoning based questions, flowchart, chemical reactions involved and MCQ would be given as homework.(Question pattern in accordance to WBCHSE) NOTE: Revision of the entire syllabus in accordance to WBCHSE for the selection examination.	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)
DECEMBER	NIL	NA	NA	NA	NA

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Rumeli Dasgupta

ACADEMIC CO-ORDINATOR

Susmita Banerjee
St. Lawrence High School 29.01.19

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