

SYLLABUS FOR WEEKLY EXAMINATION

(2075/05/24-SUNDAY)

GRADE –XII (CHEMISTRY)

ZINC: Extraction, properties and uses of Zn, preparation, properties and uses of zinc white and white vitriol Galvanization.

MERCURY: Extraction of Mercury from Cinnabar, Properties and uses of Mercury.

CHEMICAL KINETICS: Concept of reaction rate, Average and Instantaneous rate of reaction, Factors that influences the rate of reaction, Rate law equation , Rate constant and its units ,1st order, 2nd order, 3rd order & zero order reaction , Order and Molecularity of a reaction, Integrated rate law for a first order reaction, Half-life of a reaction (First order), Explaining the increase in reaction rate with temperature or collision theory, Concept of activation energy.

ALCOHOL: Preparation, physical and chemical properties.

PHENOL: Preparation, physical and chemical properties.

AROMATIC HYDROCARBON: Definition, characteristics of aromatic compounds, Huckel's rule, structure of benzene, isomerism and orientation of benzene derivatives, preparation of benzene, physical and chemical properties of benzene.

VALENCE SHELL ELECTRON PAIR REPULSION (VSEPR) THEORY: prediction of molecular geometry (shape of molecules) on the basis of VSEPR and hybridization.

Notes:

- 1) *There will be four sets of question A, B, C & D. Sets A & B are general questions while C & D are brainstorming question sets. To solve set C & D, you have to inform to administration through CR up to Friday.*
- 2) *In sets A & B, 60% questions will be asked from CHEMISTRY HOME ASSIGNMENT SETS (DAY 1-7).*
- 3) **Absence with no valid reasons:** *CHEMISTRY HOME ASSIGNMENT SETS (DAY 1-7) should be solved for **five times** in case of the absence without a valid reason and have to attend the re-exam at 7:00 am on Friday, 29th Bhadra 2075.*
- 4) **In the case failure:** *CHEMISTRY HOME ASSIGNMENT SETS (DAY 1-7) should be solved for **two times** and have to attend the re-exam at 7:00 am on Friday, 29th Bhadra 2075.*

Note: *There will be four sets of question A, B, C & D. Sets A & B are general question while C & D are brainstorming question sets. To solve set C & D, you have to inform to administration through CR up to Friday*

