

Rayat Shikshan Sanstha's
KARMAVEER BHAURAO PATIL COLLEGE, VASHI, NAVI MUMBAI
MEETING OF BOARD OF STUDIES

(Autonomous College)

Action Take Report

[w.r.t/ Meeting held on 30/09/2019]

1. Welcome of new BOS member Dr. Bapu Gawade, Director, Clean Chem Pharma, Rabale in the BOS in Chemistry.
2. Outline of T.Y.B.Sc. Chemistry Syllabus of all papers Presented.
3. New Topic was added in Physical Chemistry such as Gas ionization Chamber and Proportional Counter.
4. In the Inorganic chemistry Acetic acid instead of dinitrogen tetra Oxide and also introduced To find Steric no. by using formula $H=1/2(V+M-C +A)$
5. In organic chemistry paper III determining mechanism of a reaction: Product analysis, Kinetic studies, Stereochemical outcome, Detection and trapping of intermediates, Crossover experiments, Kinetic isotope effect –primary kinetic & secondary kinetic isotope effect was introduced. Claisen condensation, Michael addition. (Apply) Stereo selectivity and Stereo specificity: Idea of enantioselectivity (ee) and diastereoselectivity (de). Topicity-enantiotopic and diastereotopic atoms, groups and faces was introduced. The Formation and stability of Carbanion. Reactions involving carbanions and their mechanisms: Aldol, Claisen, Dieckmann and Perkin condensations. Synthesis and Synthetic applications of Malonic ester, Acetoacetic ester and Wittig reagent, use of PTC, crown ether, ultrasound, and solid supported reagents in the green synthesis. In place of agrochemicals the Carbanions and their reactions, Introduction, Formation and stability of Carbanion. Reactions involving carbanions and their mechanisms: Claisen Condensation. Robinson Ring-forming Reaction, Darzen Condensation and Mannich Reaction condensations. Synthesis and Synthetic applications of Malonic ester, Acetoacetic ester and Wittig reagent added.
6. In Analytical chemistry Spectrophotometry, Introduction, Electromagnetic spectrum, Interaction of electromagnetic radiations with the matter, Mathematical Statement and derivation of Lambert's Law and Beer's Law, Terminology involved in

spectrophotometric analysis, Instrumentation of single beam colorimeter, Instrumentation of single and double beam spectrophotometer, Principle of additivity of absorbance and simultaneous determination, Spectrophotometric Titrations, Experimental Applications- Structure of organic compounds, Structure of complexes, Numerical Problems

The addition of Electrophoresis: Introduction, Principle and theory of electrophoresis, Different types of electrophoresis techniques, Moving Boundary Electrophoresis, Zone electrophoresis- Paper, Cellulose acetate and Gel electrophoresis, Applications of electrophoresis is done.

7. In the Evolution Pattern online examination of 20 marks was made Compulsory for all classes

Date: 30/09/2019


PRINCIPAL
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