

Minutes BOS meeting 13th September 2019

Paper I-SBSCHE501

Theory

- i) In Nuclear Reactor fuel reprocessing, Nuclear waste disposal and management should be included.
- ii) Batteries and biosensitized solar cells should be included.
- iii) When setting question paper for the exam, derivations should not be asked, but a particular equation should be given and questions based on that equation must be asked.
- iv) International Olympiad has solved examples in chemistry on its website and they can be used for reference.
- v) In Adsorption microemulsions eg n-hexane, water surfactant & oil etc.
- vi) Conductive Polymers and degradation of polymers should be included.
- vii) Chemical shift should be removed in NMR.
- viii) Some students from IIT Kanpur have made a Potentiostat, which costs approx. Rs.70,000/-.
If possible, it can be purchased and experiments on the same can be included in the syllabus.
- ix) Reference books suggested for Paper I are:
 - Drew Mayer for Nuclear Chemistry
 - Fundamentals of Molecular spectroscopy by Banwell and NMR Spectroscopy an Introduction by Gunther.
 - Polymer Science by V R Gawarikar.

Paper II- SBSCHE502

Theory

- i) Solid state synthesis should be included.
- ii) Inform the students how sulfuric acid is synthesized in present times.
- iii) When teaching organometallics, discuss safety and storage.
- iv) Use real life examples when discussing in class rather than arbitrary examples.
- v) Reference books suggested for Paper II are:
 - Principles of the Solid state by H.V.Keer.
 - Solid State Chemistry by D.K.Chakrabarty.
 - Nanotechnology: Principles and Practices-S.K.Kulkarni.

Paper III- SBSCHE503

Theory

- i) Palladium and zinc compounds to be added in organometallics.
- ii) When teaching Wittig reaction, discuss the atom economy of the reaction.
- iii) Add retrosynthetic analysis.
- iv) Can have one entire paper on Spectroscopy.
- v) Photoreduction of dyes can be added in photochemistry.

Paper IV- SBSCHE504

Theory

- i) Add differential polarography.
- ii) Demonstrate polarography experiment.

Practicals:


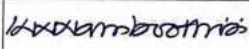
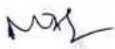
- i) Include an experiment on cyclic voltammetry.

Applied Component- SBSAPC501


- i) Do not add soaps and detergents.
- ii) Reduce or remove synthesis and structures of drug and dyes.

The following points were also discussed:

Dr. R Jayaraman to give contacts for faculty in ICT which can give suggestions for the formulation of the Applied Component syllabus.

Name	Designation	Signature
Prof. Santosh Haram	Vice-Chancellor's Nominee	
Prof. Radha Jayaram	Subject Expert, ICT Mumbai	
Prof. N.N. Namboothri	Subject Expert, IIT Mumbai	
Dr. Rajiv Kothurkar	Industry Expert	R. M. Kothurkar
Dr. Meetal Dasgupta	Illustrious Alumni	

Minutes passed on 15th Feb, 2020.


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