

The 16th meeting of Board of Studies in chemistry (PGI) under autonomous Scheme was conducted on 09.03.2019 (Saturday) at 2.00 pm in the department.

Members present :

Dr. K. Kalpanadevi	chairman	<i>Kalpanadevi</i>
Mrs. A. Amuthavalli	Member	<i>A. Amuthavalli</i>
Dr. A. Pulepavani	Member	<i>A. Pulepavani</i>
Mrs. A Nagaveni	Member	<i>A. Nagaveni</i>
Mrs. V. Ramya	Member	<i>V. Ramya</i>

Dr. S. Ponnusamy

Subject Expert

S. Ponnusamy —

M.C. R. Nagamatha

Student Representative

R. Nagamatha

Members of leave of absence :

Dr. K. Pandian University Representative

Dr. K.P. Elango Subject Expert

Dr. R. Sirakumar Alumni

Mr. B. Gururajan Representative from Industry.

The chairman welcomed the gathering and then requested them to take up the agenda for discussion.

Item 1 : To revise the syllabus in such a way that it contains the topics of current trends.

Item 2 : To include 2 new papers as electives, replacing ^{two} of the existing papers.

The modifications made in the syllabus are :

1. In organic chemistry i, 'heteroannulenes' has been removed, 'Generation of intermediates' has been included in unit i. In unit ii, 'Arenium ion mechanism - orientation and reactivity of mono and disubstituted benzene' have been included. In unit iii, 'SNAr and Benzyne mechanism' have been included. In unit iv, 'Synthetic equivalents ^{and protecting group}' have been included.

2. In Inorganic chemistry i, 'ionic radii, electronegativity', 'HSAB - Theory and principle' have been included. 'Non-aqueous solvents' has been removed in unit i. In unit ii, 'Madelung constant' has been removed. In unit iv, 'Nuclear power projects in India' has been included.

3. In Physical chemistry i, 'Surface phenomenon' has been removed and 'Autocatalysis' has been included in unit iv.

4. In organic chemistry ii, 'dehydration of alcohol and dehydrohalogenation' have been removed from unit i. In unit iv, 'Quenching' is included. In unit i, E, CB mechanism is included. In unit ii, 'enantiotopic and diastereotopic faces, atoms and ligands', 'stereospecific and stereoselective synthesis' have been included.

5. In Inorganic chemistry ii, 'co-ordination numbers and their geometries' are included in an elaborate manner in unit i.
 - Unit i - Theories - VBT, CFT, MDT.
 - Unit iii - Coordination cho ii.
 - Unit iv - 'Applications of trans effect' is included.
 - Unit v - Bioinorganic chemistry is shifted to unit Inorganic chemistry ii, instead 'Reaction mechanism' is included.
 - Text book - 'MMT' has been added.

- b. In physical chemistry i, 'S.E for particle waves, Hermitian operator' ^{added} 'Quantization of ... values' - removed in Unit i. Names of three units are changed.
In unit ii, 'infinite potential barrier' is included. The topics 'S.E for H atom, separation of variables' are shifted to unit iii.
7. In organic chemistry ii, the topics 'DCR, Woodward-
Hoffmann hydroxylation' are removed from unit ii.
8. In inorganic chemistry ii, names of first 3 units are changed. In unit ii, reactions of coordinated CO , NO , arenes are removed. Unit iv - Bioinorganic chem.
9. In physical chemistry iv, 'Phase' has been removed from unit i. In unit iv, 'ensembles' are included and 'justification of nomenclature' is removed.
In unit i, 'photosynthesis PS i, PS ii' is included and 'excited state dipole moment' is removed.
10. In Spectroscopy, 'Beer-Lambert's law' is given specifically, instead of 'Laws of photoche'.
Text book - Fundamentals of molecular spectroscopy by Benwell is included.
11. Major Elective paper - 'Physical methods in chemistry' is renamed as 'Analytical chemistry'. In unit iv, 'ESR - application to Cu complexes' is included.
12. In Major Elective paper - 'Green and Nanotechnology' 3 units are distributed for Green che. and 2 units for Nanotechnology. 'Supramolecular che' has been removed.
- Two New elective papers - Selected topic in chemistry and Textile and Dye chemistry have been introduced.

13. NME - Environmental Chemistry is renamed as 'Chemistry of Environment'.
14. NME - 'Scientific Thesis writing and paper presentation' is renamed as 'Scientific Thesis writing'. Unit & title is changed as manuscript preparation.
 Journal article - types, impact factor, h-index' are included.
15. ALC 2 - 'chemistry of drugs' (name changed)
 'Introduction to drugs' - is included in unit 2.
16. In ALC 3 : Food chemistry, 'nutraceuticals' is included in unit 5. Reference book - new edition is included for 'Food chemistry by Srivastava'.

Suggestions given by the board :

Non-major Elective papers can be offered to the students of other departments.

Feedback collected from all the Stakeholders were also analysed and discussed.

The board recommended the chairman to present the curricula, Scheme of examinations and syllabus in the ensuing academic council meeting for approval and implementation for the students to be admitted from the academic year 2019-20 and onwards.

Ack

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Chairman

HEAD
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