



## UNIVERSITY OF CALCUTTA

Notification No.CSR/33/19

It is notified for information of all concerned that the Syndicate in its meeting held on 08.8.2019 (vide Item No.22), subsequently confirmed by the Syndicate dated 27.08.019 (Item No.01) approved some amendments to the Syllabus of B.Sc. (Honours/General) Courses of Studies in Chemistry (vide CSR/12/18 dated 04.06.2018) under CBCS, in this University, as laid down in the accompanying pamphlet.

The above shall take immediate effect from the odd Semester Examinations, 2019 and onwards.

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Prof.(Dr.) Debasis Das

Registrar (Acting)

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KOLKATA-700 073

The 9th September, 2019.

## Clarification/Rectification of the Syllabus

### (B.Sc. Chemistry Hons. & General)

1. In CEMA-CC-1-1-P (Inorganic Chemistry: I(1) Lab), on page 8, under the section "Oxidation Reduction Titrations", Experiment 2 should be read as "Estimation of Oxalic Acid and Sodium Oxalate in a given mixture".
2. In CEMA-CC-1-2-P (Page No. 12) at the end of the title of the Physical Chemistry P (1) LAB Experiment No. 1, the words (including parentheses) **(Clock Reaction)** should be added.
3. In CEMA-CC-2-3-Th (Organic Chemistry 2), under the section "Stereochemistry II" (Page 14), the topic "P/M descriptors" should be omitted.
4. In CEMA-CC-2-3-Th (Organic Chemistry 2), under the section "General Treatment of Reaction Mecanism III" (Reaction Kinetics; Page 14), the topic " $\beta$ -secondary kinetic isotope effect ( $K_H/K_D$ )" should be omitted.
5. In CEMA-CC-2-3-Th (Organic Chemistry 2), under the section "General Treatment of Reaction Mecanism III" (Reaction Kinetics; Page 13), the topic "Electrophilic Catalysis" should be omitted.
6. In CEMA-CC-3-5-TH (Physical Chemistry-2), under the section "Ionic Equilibrium" on page 20, the topic "Multistage equilibrium

in polyelectrolyte systems; hydrolysis and hydrolysis constants”  
should be omitted.

7. In CEMA-CC-3-5-TH (Physical Chemistry-2), under the section “Ionic Equilibrium on page 20, the topic “Qualitative treatment of acid-base titration curves(calculation of pH at various stages) ” should be changed to topic “Quantitative treatment of acid-base titration curves(calculation of pH at various stages for the titration of a strong monoprotic acid vs a strong base, a weak monoprotic acid vs a strong base and a dibasic acid(for eg: Oxalic Acid) against a strong base ) ”
8. In CEMA-CC-3-6-P (Inorganic Chemistry Practical), on page 23, under the section “Complexometric Titration”, Experiment 5 should be read as “Al(III) and Fe(III) in a mixture”.
9. In CEMA-CC-3-7-P (Organic Chemistry 3), under the section “B. Quantitative Estimation” (Page 26), “Any FIVE will be set in the examination” should be omitted.
10. In CEMA-CC-4-8-P (Organic Chemistry 4), under the section “Experiment: Qualitative Analysis of Single Solid Organic Compounds” (Page 30), “detection of Br by Lassaigne’s test” should be omitted.
11. In CEMA-CC-4-8-P (Organic Chemistry 4), under the section “Experiment: Qualitative Analysis of Single Solid Organic Compounds” (Page 30), detection of functional groups by

systematic tests should read "distinction between -CHO and >C=O" needed" in place of "no distinction between -CHO and >C=O" needed".

12. In CEMA-CC-4-8-P (Organic Chemistry 4), under the section "Experiment: Qualitative Analysis of Single Solid Organic Compounds" (Page 30), "6. Identification of the compound through literature survey" should be omitted.
13. In CEMA-CC-4-8-P (Organic Chemistry 4), under the section "Experiment: Qualitative Analysis of Single Solid Organic Compounds" (Page 29), should read "at least four samples" in place of "at least six samples".
14. In CEMA-CC-4-9-TH (Physical Chemistry-3), under the section "Crystal Structure" on page 31, the topic "Void space in p-type, F-type and I-type cubic systems" should be changed to "Void space in cubic systems".
15. In CEMA-CC-5-11-TH (Physical Chemistry-4), under the section "Angular Momentum of Quantum Chemistry-2" on page 35, the topic "Quantization of the square of the total angular momentum and z-component" should be replaced by "Discussion of Eigenvalues of L<sub>z</sub> and L<sup>2</sup> operators".
16. In CEMA-CC-5-12-Th (Organic Chemistry 5), under the section "Carbocycles and Heterocycles" (page 38), the topic "Thiophene" should be omitted.

17. In CEMA-CC-5-12-P (Organic Chemistry 5), under the section "A: Chromatographic Separation" (page 40), the topic "Column Chromatographic separation of mixture of dyes" should be omitted.
18. In CEMA-CC-5-12-P (Organic Chemistry 5), under the section "B: Spectroscopic Analysis of Organic Compounds" (page 40), the topic "Characteristic Bending Vibrations are included" should be omitted.
19. In CEMA-CC-6-14-P (Page No. 46) at the end of the title of the Physical Chemistry Practical Experiment No. 6, the words (including parentheses) **(Using Tensiometer)** should be added.
20. In SEC-A (Semester 3, SEC-2, Analytical Clinical Biochemistry), page 65-66, the topic "Hands on Practical" should be omitted.
21. In SEC-B (Semester 4, SEC-3, Pharmaceutical Chemistry), page 67, the topic "Hands on Practical" should be omitted.
22. In SEC-B (Semester 4, SEC-4, Pesticide Chemistry), page 67, the topic "Hands on Practical" should be omitted.
23. In DSE-B-3 (Polymer Chemistry), under the section Practicals-DSE-B-3: Polymer Chemistry, page 63, the topic "Polymer analysis" should be omitted.

**In the BSC General Chemistry(CEMG) Syllabus,  
The distribution of Skill Enhancement Courses should be as  
follows:**

**SEC(A): (SEC1 in Semester III and SEC2 in Semester V)**

- SEC1: Basic Analytical Chemistry
- SEC2: Analytical Clinical Biochemistry

**SEC(A): (SEC3 in Semester IV and SEC4 in Semester VI)**

- SEC3: Pharmaceuticals Chemistry
- SEC4: Pesticide Chemistry

**Note:** A student who will opt for Chemistry as his/her Skill Enhancement Course will take 1 course from SEC(A)(Either in Semester III or Semester V) and another course from SEC(B)(Either in Semester IV or Semester VI)