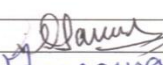
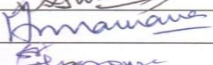
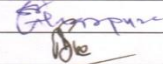
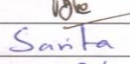
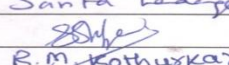
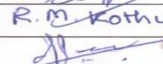



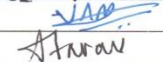
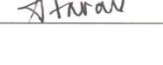



S.P.MANDALI'S,
RAMNARAIN RUIA COLLEGE
Matunga, Mumbai 400 019

DEPARTMENT OF CHEMISTRY

Meeting of

'Subject Board in - Chemistry'
Saturday, 29th July 2017 at 02.00 pm.
Venue: Ruia Alumni Hall.

Sr. No	Name	Sign.	Contact No.
1	Prof. Suhas Pednekar		
2	Professor S.D. Samant		9892950580
3	Dr. Ramanya		8767032849
4	Prof. Santosh Gharpure		9167948171
5	Dr. P. A. Sathe		4757410112
6	Dr. Savita Ladage		9820250770
7	Dr. Sugandha Shetye		9819500324
8	Dr. Rajiva Kothurkar		9920449961
9	Dr. Ajit Datar		
10	Dr. Jyoti Patwardhan		
11	Dr. Manish Hate		
12	Dr. A.K. Mapari		
13	Mr. Varad Modak		8097563205
14	Ms. Antara Vaidyanathan		7738277156

Agenda:

- Formation of syllabus committee
- Formation of syllabi for Undergraduate and Post graduate classes
- Examination and evaluation patterns
- Students' expectations from autonomy.

Minutes of the Meeting

Minutes of the meeting held in Ramnarain Ruia College of Proposed 'Board of Studies in the subject- Chemistry' on 29th July 2017 at 2.00pm

Venue : Ramnarain Ruia College

The following members were present for the meeting.

1. Professor S.D. Samant : Sr. Professor and researcher from ICT
2. Dr. Ramanna : Head, University Department of Chemistry
3. Professor Santosh Gharpure : IIT Bombay
4. Dr. Savita Ladage : Homi Bhabha Centre for Science Education, Mumbai
5. Dr. Rajiv Kothurkar : Industry Expert
6. Dr. Sugandha Shetye : Associate Professor & Dean of Science
K.J. Somaiya College (Autonomous) Mumbai

7. Dr. P. A. Sathe : Former Head, Chemistry Dept

8. Dr. Jyoti Patwardhan : Associate Professor, Chemistry Dept.

9. Dr. Manish Hate : Associate Professor, Chemistry Dept.

10. Dr. A.K. Mapari : Asst. Professor , Chemistry Dept.

11. Mr. Varad Modak : Student Representative

12. Ms Antara Vaidyanathan : Student Representative

- Dr. Jyoti Patwardhan welcomed the committee members on behalf of Ruia College. He briefed the gathering that the autonomous status (partial) would be obtained in the academic year 2017-18. The members witnessed quite brainstorming discussions which enlightened the teachers of Chemistry Department of Ruia college and ultimately gave an essential insight to view the desired autonomy with a different perspective. The above meeting had the duration of three hours and thirty minutes. So, for the sake of convenience, the views of individual experts are narrated collectively in a nutshell.

- Dr. Patwardhan profusely expressed Professor Pednekar's views about the necessity and significance of autonomy as it would be easier to fill the gap between classroom teaching and industry requirement. Chemistry being the biggest department in college, he was quite confident that it would set an example for designing and reforming the syllabus which would compliment enquiry based education and also mark the difference in the evaluation of students. According to him the experiential learning and internship component must be an integral part of the curriculum. That will increase the acceptability of our students and get them an edge over

other students of non-autonomous colleges. He was quite guaranteed that with the advent of autonomy the relevant changes would be visible. She also expressed his concern over the challenges to change the mindset of people or the stake holders. Importance of the motivation of the teachers was underlined by him in this regard.

- Prof. Samant expressed the need of sufficient time for syllabus making. According to him the academic body should be formed first. It should have the directive and principle to attain the autonomy. These directives will lead to the formation of SKILL BASED COMPONENT of the syllabus. Dr. Samant specified that the syllabus of Mumbai University is examination oriented and Ruia College syllabus must deviate from this pattern. He also enquired whether the college prepared rules and regulations and the statute of the autonomy. *(Since the New University Act is passed in March 2016, colleges are waiting for the statutes for autonomous colleges.)*
- Dr. Samant suggested to form a Board of Academics on Adhoc basis to conduct meetings and to discuss the lacunae in current system. According to him, Board of Academics should extend certain guidelines and prepare a workable model of autonomy which can be replicated. It should adopt best practices from other institutes. He also suggested not changing the syllabus drastically, instead changing the evaluation system right from the beginning. Also, he expressed the need of organisation of orientation programme/s for ALL TEACHERS, for the successful implementation of autonomy.
- Dr. Ramanna agreed that with the shortcomings in the present examination pattern, unfortunately University of Mumbai has become a punching bag. The dilution in the syllabus is also of great concern. According to him the level of students entering would determine the elevation of standard of autonomy. He also suggested admitting the students on the basis of counselling and not on the basis of marks.
- Dr. Gharpure shared his experiences of IIT Chennai and IIT Bombay. He told that IITs have prepared some models for autonomy. He also emphasized on the motivation of all the stake holders for the successful autonomy. He expressed the significance of the role of teachers in this scenario. Evaluation pattern must be very critical. According to him there is a huge disparity in the evaluation pattern of autonomous colleges, non autonomous colleges in India, institutes like IITs and colleges overseas. According to him career counselling should be started at entry level.
- Dr. Savita Ladge agreed with Dr. Samant and Dr. Gharpure's Views. She critically underlined the difference in students' profile. The institute must arrange for the environment for the students to get motivated. She also expressed the need of support system offered to teachers- subject wise and education wise as well. Teachers have to meet good practices. They should strive hard for content enrichment . Also, according to her assessment should have proper bearing. The

Project based learning should be an essential component of curriculum. Need of learning and exposure to subject is quite important in this regard.

- Dr. Rajiva Kothurkar said that there should be a structured plan for autonomy. Every year a definite goal has to be set. There must be a target meter or benchmark for the elevation. The students career path must be well defined. The industry connect has to be developed and strengthened. There should be some professional training for students. At undergraduate level, the industry internship must be made COMPULSORY. For that the institute must identify the industries with the help of alumni.
- Dr. Padmakar Sathe emphasised the need of attending lectures at FYBsc level. The admissions to professional courses hamper their seriousness in attending lectures initially and they detach from classroom. Also, the extra curricular activities and other activities do not give adequate time for teaching and learning.
- Dr. Sugandha Shetye is representing an autonomous college, she shared her experiences. She also emphasized on importance of motivation of staff to overcome the reluctance towards autonomy. With autonomy they could explore experimentation and the flexibility obtained has given them a boost. Being an alumna of Ruia College, Dr. Shetye appealed everyone to gear up for the change and take it absolute positively.
- Varad Modak and Antara Vaidyanathan , being student representatives attended this meeting. They were well aware about their role in the committee as is to communicate the needs, expectations and complaints of the entire mass of students having Chemistry, to the panel and faculty, and to advise and observe during proceedings of the same.

According to them, the main need for students as they just enter the life of a degree college student, is to clear some major issues and confusions regarding career options and an exposure to industry, that is vital in gaining meaningful experience, which is very important on the professional front. They suggested a few ways in which this can be done, are:

- a) Career guidance right from the intake stage.
- b) Proper orientation for freshers.
- c) Industry visits
- d) Guest Lectures
- e) Opportunities for internships
- f) Project based learning

They also expressed that many students are seen to leave the course in the duration of the First Year itself, or are seen to have consistently low marks and regular occurrence of ATKTs. The main reasons for this, are that they are either waiting for results of admissions to professional courses like engineering or medicine, or are simply not motivated enough to perform well. It is necessary for the faculty to make even mundane topics seem so interesting, that a student is self-motivated to learn more about them. Increasing curiosity, encouraging spirit of enquiry, and promoting a culture of knowledge are all necessary to keep students hooked into the subject.

- They further extended that change is the only constant in this world, and progressing with time is of paramount importance. To the realization of this objective, a gradual inclusion of topics that are at the cutting edge of industry, would prepare students for the future, with a competitive edge.
- In response to a question from **Prof. Samant**, regarding the system of evaluation, his response was that a system of continuous low-impact evaluation, in the form of frequent, small, 10 mark exams, would ensure constant upkeep of revision and also reduce study load. This change would not be unwelcome to the students.
- In response to a question by **Dr. Ladge**, regarding the merits of industry connect and project based learning, his response was that it would be beneficial to students and teachers alike, without a doubt. Such a synergistic approach would definitely contribute to the all-round development of students.

**S.P.MANDALI'S,
RAMNARAIN RUIA COLLEGE**
Matunga, Mumbai 400 019

DEPARTMENT OF CHEMISTRY
Meeting of

'Subject Board in - Chemistry'
Saturday, 10th March 2018 at 03.30 pm.
Venue: Ruia Alumni Hall.

Sr. No	Name	Sign.	Contact No.
1	Prof. Suhas Pednekar		9820023919
2	Professor S.D. Samant		
3	Dr. Ramanna		
4	Prof. Santosh Gharpure		9167948171
5	Dr. P. A. Sathe		9757410112
6	Dr. Savita Ladage		9820250770
7	Dr. Sugandha Shetye		
8	Dr. Rajiva Kothurkar		9920449961
9	Dr. Ajit Datar		9967587318
10	Dr. Jyoti Patwardhan		
11	Dr. Manish Hate		9987516958
12	Dr. A.K. Mapari		9869545908
13	Dr. Subhash VAnmali		9322267610
14	Mr. Varad Modak		8097563205
15	Ms. Antara Vaidyanathan		7738277156

The subject board meeting in Chemistry was held on 10th March, 2018 at 3.30pm in Ruia College Alumni Hall.

The agenda for the meeting was as follows:

1. To discuss the syllabus for all classes for the academic year 2018-19.
2. To decide on the modalities of assessment which includes the question paper pattern.
3. To scrutinize the earlier question papers set under autonomy. (2017-18)
4. To consider the internal component for practical examination for the academic year 2018-19.

Leave of absence was granted to :

Dr. M.VV. Ramanna, Prof. S.D. Samant and Dr. Sugandha Shetye

The minutes of the meeting are as follows :

- As decided in the previous meeting a syllabus model was prepared by the faculty and communicated to the members and suggestions were invited for the same.
- As the students who have had appeared for FYBSc University examination and also the same University of Mumbai syllabus (for affiliated colleges) was exercised by them at SYBSc level with little flexibility, it was decided that there should not be any change in the syllabus for them at TYBSc Level . A requisite flexibility and reorganization as per the compatibility and coherence of the topic should be observed.
- The major changes can be done at SYBSc level as these students have exercised syllabus of autonomous college at FYBSc level. Also, instead of keeping all three disciplines i.e. Physical, Inorganic and Organic Chemistry in Paper I and Paper II, Dr. Gharpure suggested having 3 separate papers for 3 disciplines at FYBSc per semester. But as it does not fit into UGC guidelines it was decided to make only two papers and the syllabus has to be reorganized in different manner in order to attain the suitable coherency of the topic. Viz.

FYBSC

Semester I

- **Paper I** : 3 classes of physical chemistry
Paper II : 2 Classes of Inorganic chemistry + 1 class of Organic Chemistry

Semester II

- Paper I** : 3 classes of Organic chemistry
Paper II : 2 Classes of Inorganic chemistry + 1 class of Physical Chemistry

Similarly, at **SYBSc** level,

- **Paper I** : 2 Classes of physical chemistry + 1 Class of Inorganic Chemistry
Paper II : 2 Classes of Organic chemistry + 1 class of Inorganic Chemistry

3rd paper which is elective . The distribution is as follows:

At semester III

Paper III: 2 classes of Analytical Chemistry and 1 Class of Environmental Chemistry

At semester IV

Paper III: 2 classes of Analytical Chemistry and 1 Class of Industrial Chemistry

- Also, it was recommended by the experts to include learning objectives for practicals catechetically. The members emphasized on the inclusion of project based learning in practicals and joining the theory and practical components.
- For Internal assessment of practicals, small doable projects can be given. Also, planning of practical can be one aspect of assessment.

- The need of tutorials for the topics before recapitulation and also after the conclusion was underlined by the eminent members.

In a nutshell, it was decided to reorganize the syllabi in such a manner that coherency of the topics is observed and also the learning objectives for practicals have to be included which will facilitate the students effectively. Also, the need of a workshop on ' Question Paper Framing' for teachers was underlined by all board members.
