Parvatibai Chowgule College of Arts and Science (Autonomous) Margao - Goa

MINUTES OF THE MEETING OF THE BOARD OF STUDIES IN CHEMISTRY held on 17th October 2015 at 10:00 A.M.

Vide Chowgule College Notice (F.133(C)/1013 dated 29th September 2015) a meeting of this BOS was convened on 17th October at 10.00 a.m. in the G Block, Room No. 202, Parvatibai Chowgule College of Arts and Science, Margao – Goa. Since the members present represented the Quorum, the BOS began its proceedings.

Minutes are presented in the format.

Members present:

1. Dr. G. K. Naik -Chairman 2. Dr. J. B. Fernandes - Vice-Chancellor Nominee 3. Dr. A. K. Srivastava - Academic Council Nominee 4. Dr. S. P. Kamat - Expert 5. Shri N. G. Rivonkar - Member 6. Dr. Sachin B. Kakodkar - Member 7. Mrs. Roopa S. Belurkar - Member 8. Mrs. Manjita R. Porob - Member 9. Dr. Lactina R Gonsalves - Member Secretary 10. Dr. Rohan K. Kunkalekar - Member 11. Shri Sandesh T. Bugde - Member

- Member

Members absent with Intimation:

1. Dr. Shirishbai Patel

12. Miss Arti K. Naik

- 2. Dr. J. S. Budkuley
- 3. Dr. J. Seetaramappa

Proceedings:

At the outset, the chairmen welcomed the B.O.S members for the 2^{nd} B.O.S Meeting. He read the agenda and introduced as table agenda, the courses for PG Diploma in Analytical Chemistry. The business was transacted as per the agenda.

Agenda items:

- 1. To approve the syllabi of Semester III and Semester IV for the year 2016-2017.
- 2. To approve the pattern of Question Paper.
- 3. To review the list of Core and Elective Courses at Undergraduate Programme in Chemistry.
- 4. A.O.B.
- a) Corrections in F.Y.B. Sc. Core Course, CHE-I.C-1
- b) Table Agenda: Syllabi of PG Diploma in Analytical Chemistry.

Part A: Discussion of agenda

Agendum 1

Discussion on the syllabi of Semester III and Semester IV

1. The following syllabi of the undergraduate courses were presented and discussed at the meeting. The BOS suggested certain changes in the theory and practical components in all the Core Courses which were accepted and implemented. Also, the BOS requested the members responsible for drafting the syllabus to revise the Elective Courses since the BOS felt that it may be too heavy for the students at Second Year level.

| Sr. | CORE COURSE | Nature of the | UG Level at |
|-----|--|---------------|-----------------|
| No. | | course | which offered |
| 1 | Comprehensive Chemistry-I | Compulsory | B.Sc. (Sem-III) |
| 2 | Comprehensive Chemistry-II | Compulsory | B.Sc. (Sem-IV) |
| 3 | Name Reactions and Synthetic Methodologies | Elective | B.Sc. (Sem-III) |
| 4 | Industrial Chemistry | Elective | B.Sc. (Sem-III) |
| 5 | Surface Chemistry and Catalysis | Elective | B.Sc. (Sem-III) |
| 6 | Bioinorganic Chemistry | Elective | B.Sc. (Sem-III) |
| 7 | Pharmaceutical Chemistry | Elective | B.Sc. (Sem-IV) |
| 8 | Polymer and Colloid Science | Elective | B.Sc. (Sem-IV) |
| 9 | Spectroscopic Techniques | Elective | B.Sc. (Sem-IV) |
| 10 | Chemistry of Natural Products | Elective | B.Sc. (Sem-IV) |

- 2. The current pattern of floating the electives is quite rigid and is not necessary that only Elective E-1 to E-4 should be offered in Semester–III and E-5 to E-8 offered in Semester–IV. There should be pool of at least 10 elective courses from which the students can select. Also, the department should have flexibility in designing and floating more electives if required, in the interest of the students.
- 3. The BOS suggested for revising the practical component in every core course since it does not commensurate with the theory and to include experiments which are on level with the theory of that particular course.
- 4. The BOS raised a concern about carrying out 15 experiments in each course since there will be no scope for repetition of the experiments in case of unforeseen events. The BOS

- suggests there should be minimum 12 experiments (24 contact hours) per course out of the 15 to leave room for repetition or unforeseen events or holidays.
- 5. Some of the members expressed the difficulties in conducting Continuous Assessment (CA) for the practical's wherein a batch of students are assessed by two different teachers. The BOS suggested there should be some consensus wherein one teacher can asses some experiments and other teachers can assess the other experiments for a particular course.
- 6. The BOS pointed out that the format used to cite the references is not uniform and suggested using one standard and approved format throughout and to include a separate list of text books and reference books in the syllabus.
- 7. The BOS opined that the Second Year (Semester -III and IV) is a crucial year, the elective courses designed should give an exposure to the students and prepare and train them for T.Y projects. The project ideas should be given to student in the Semester -IV, so that they are prepared when they start Semester -V.
- 8. The BOS raised a doubt whether it is possible to complete some of the experiments designed in the Elective Courses within 2 hours. It was suggested that, the feasibility and the time required to complete the experiment have to be worked out first before puting them into practice.
- 9. It was brought to the notice of the BOS that for F.Y.B. Sc., the practicals covered in one Core Course were more than the other during the Semester -I. The BOS suggested that any such discrepancies and/or corrections regarding the syllabus and practicals should be corrected and presented to the BOS in the next meeting.
- 10. The BOS was appreciative of the work done by the members in drafting the syllabus.

Resolution: The syllabi of the undergraduate courses were presented and discussed at the meeting. After suggesting some changes in the draft, the BOS resolved to pass the syllabi for the undergraduate courses.

Agendum 2

Discussion on the pattern of question paper

1. The BOS did not approve the current pattern of question paper. Since separate branches of Chemistry are involved, it needs to have separate sections/questions. B.O.S recommends that in the light of Chemistry syllabus which has two sections in every Core Course, the question paper should have separate questions for each section with proportionate weight age and the two sections should not be mixed. B.O.S has no objection for implementing the current pattern for Elective Courses.

Resolution: BOS passed the resolution to approve the pattern of the question paper with two sections in every Core Course with proportionate weight age. B.O.S passed the resolution for implementing the current pattern for Elective Courses.

Agendum 3

Review of the list of Core and Elective Courses for Semester V and Semester VI

- 1) The list of Core and Elective Courses for Semester V and Semester VI at Undergraduate Programme in Chemistry was reviewed and discussed.
- 2) In the light of the weightage given to the Core Courses and the Elective Courses under the present course structure, for which some of the members were previously unaware. The BOS felt that, the Chemistry subject is diluted and the students will be studying less Chemistry since less weightage is given to Core Courses.
- 3) The BOS is of the opinion that more than 60 % of the weightage should be for Core Courses. Since most of the Elective Courses are applicative in nature, according to the UGC structure, Electives Courses should be offered only during the last two semesters. The BOS expressed a need to think about this matter.
- 4) BOS members expressed an apprehension about the current pattern and felt that adequate care must be taken for students going for post graduation or upper mobility.

Resolution: BOS passed the resolution to approve of the list of Core and Elective Courses for Semester V and Semester VI

Agendum 4

Under A.O. B. the following items were discussed

- a) Corrections in F.Y.B. Sc. syllabus: It was brought to the notice of the B.O.S. the errors in F.Y.B. Sc. Core Course:
 - (i) CHE-I.C-1: Section I, Topic 4, 'Liquefaction of gases (Clarke's method)' which has been changed to 'Liquefaction of gases (Claude's method)'.
 - (ii) CHE-I.C-2: Section II, Topic 2, 'Comparative study within group and diagonal relationship of groups 13, 14, 15, 16, 17 ' has been changed to 'Comparative study within group and diagonal relationship'.
- b) The Chairman presented the draft syllabus of Post Graduate Diploma in Analytical Chemistry as Table agenda.
 - (i) The BOS felt that the draft should have been first sent to the B.O.S. members and the feedback obtained within a given timeframe and then presented during the BOS meeting for approval.
 - (ii) The members feel that if there was time constraint, the Chairman should have at least notified the members prior to the meeting about this particular agenda. The draft syllabus which was presented by the BOS Chairman was deferred.
 - (iii) The members queried whether the BOS is in a position to comment on PG courses, since this B.O.S is appointed for Undergraduate level. The members were of the opinion that this agenda does not come under the purview of the B.O.S.

Resolution: BOS passed the resolution to place the syllabus of Post Graduate Diploma in Analytical Chemistry in the next BOS meeting.

<u>Part B:</u> Resolutions/Recommendations that require consideration/approval of the Academic Council.

1. The syllabi of Semester-III and Semester IV in Chemistry for B. Sc. programme.

| Sr. | COURSE | Nature of the | UG Level at |
|-----|--|---------------|-----------------|
| No. | | course | which offered |
| 1 | Comprehensive Chemistry-I | Compulsory | B.Sc. (Sem-III) |
| 2 | Comprehensive Chemistry-II | Compulsory | B.Sc. (Sem-IV) |
| 3 | Name Reactions and Synthetic Methodologies | Elective | B.Sc. (Sem-III) |
| 4 | Industrial Chemistry | Elective | B.Sc. (Sem-III) |
| 5 | Surface Chemistry and Catalysis | Elective | B.Sc. (Sem-III) |
| 6 | Bioinorganic Chemistry | Elective | B.Sc. (Sem-III) |
| 7 | Pharmaceutical Chemistry | Elective | B.Sc. (Sem-IV) |
| 8 | Polymer and Colloid Science | Elective | B.Sc. (Sem-IV) |
| 9 | Spectroscopic Techniques | Elective | B.Sc. (Sem-IV) |
| 10 | Chemistry of Natural Products | Elective | B.Sc. (Sem-IV) |

- 2. The BOS resolved to have 12 experiments (24 contact hours) in every Core Course out of the 15 experiments designed.
- 3. Flexibility to the Department of Chemistry in shuffling the Core and Elective Courses between the semesters of the B.Sc. programme and if possible flexibility in designing more electives in future in the interest of the students.
- 4. The BOS strongly recommends that in the light of Chemistry syllabus which has two sections in every Core Course, the question paper should have separate questions for each section with proportionate weightage. B.O.S has no objection for implementing the current pattern for the elective courses.
- 5. According to the B.O.S, more weightage should be given to Core Courses. Since this is not the case with the current course structure, the BOS recommends that the course structure and the identified titles may be reviewed for Semester V and Semester VI in view of the weightage given to Core Courses and the Elective Courses. The members suggested the possibility of combining the Electives Courses of Semester V and Semester VI or making them into 2 Credits Course in order to make room for basic and fundamental Chemistry which could not be included in the Core Courses.
- 6. The B.O.S strongly recommends that the syllabus should be revised at the end of each semester and regularly upgraded. It is not full proof and still needs to evolve.
- 7. The BOS recommended preparing a separate practical booklet of all practical experiments which can then be combined into laboratory manual.

The Chairman thanked the members of the Board of studies in Chemistry for their valuable contribution and active participation.

The meeting ended at 5:10 p.m. with a vote of thanks to the chair.

The following members of the Board of Studies in Chemistry were present for the meeting.

| 1. | Dr. G. K. Naik | - Chairman |
|-----|--------------------------|-------------------|
| 2. | Dr. J. B. Fernandes | -Member |
| 3. | Dr. A. K. Srivastava | -Member |
| 4. | Dr. S. P. Kamat | -Member |
| 5. | Shri. N. G. Rivonkar | -Member |
| 6. | Dr. Sachin B. Kakodkar | - Member |
| 7. | Dr. Roopa S. Belurkar | -Member |
| 8. | Mrs. Manjita R. Porob | - Member |
| 9. | Dr. Lactina R. Gonsalves | -Member Secretary |
| 10. | Dr. Rohan K. Kunkalekar | -Member |
| 11. | Shri. Sandesh T. Bugde | -Member |
| 12. | Miss. Arti K. Naik | -Member |

Dr. Shirishbhai Patel, Dr. J. S. Budkuley and Dr. J. Seetharamappa, conveyed their inability to attend the meeting.

Dr. Lactina Gonsalves Member Secretary Board of Studies

Dr. G. K. Naik Chairman Board of Studies

Date: 17/10/2015

PART C: The remarks of the Dean of the Faculty:-

- a. The minutes are in order
- b. The minutes may be placed before the Academic Council with remark, if any.
- c. Important points of the minutes which need clear policy decision of the Academic council to be recorded.

| Date: | |
|------------------------|------------|
| Signature of the Dean: | |
| (Faculty of Sciences) | Dr. A. Das |