



Anekant Education Society's

**Tuljaram Chaturchand College
of Arts, Science, Commerce, Baramati
(Autonomous)**

DEPARTMENT OF CHEMISTRY

(Faculty of Science and Technology)

Minutes of Board of Studies Meeting No. 7

Date of Meeting: 12/04/2022

Venue: Department of Chemistry

April-2022

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)

Department of Chemistry

NOTICE

Date: 08/04/2022

Board of Studies Meeting

All members of Board of Studies in Chemistry are here by informed that, as per notice from College authority, our BOS meeting is organized on **12th April 2022** at **12.00 noon** via on-line/off-line mode. As an estimated member of the board, you are invited for this meeting. Your presence and inputs during the meeting would be greatly appreciated.

AGENDA OF THE MEETING

The agenda of the meeting included the following subjects:

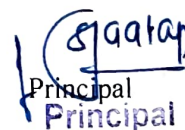
1. To confirm the minutes of the previous meeting held on 17th October 2021.
2. To design and approve course and credit structure for the B.Sc. and M. Sc. programme in accordance with 2022 pattern.
3. To prepare and approve curriculum of F.Y.B.Sc. Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
4. To prepare and approve curriculum of M.Sc.-I Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
5. To prepare and approve curriculum of certificate courses for UG and PG programme as per 2022 pattern.
6. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum.
7. Any other issue with the permission of the chair.



Chairman
Board of Studies in Chemistry

Head

DEPARTMENT OF CHEMISTRY
Tuljaram Chaturchand College
Baramati (Dist.Pune)



Principal
Principal
Tuljaram Chaturchand College
Baramati

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)

Department of Chemistry

AGENDA OF THE MEETING

The agenda of the meeting included the following subjects:

1. To confirm the minutes of the previous meeting held on 17th October 2021.
2. To design and approve course and credit structure for the B.Sc. and M. Sc. programme in accordance with 2022 pattern.
3. To prepare and approve curriculum of F.Y.B.Sc. Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
4. To prepare and approve curriculum of M.Sc.-I Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.
5. To prepare and approve curriculum of certificate courses for UG and PG programme as per 2022 pattern.
6. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum.
7. Any other issue with the permission of the chair.

List of Members Presented for the BOS Meeting

The following internal and external BOS members were attended the Board of Studies

Sr.No.	Name of Member	Designation
1.	Mr. Sanjay R. Kale Head & Associate Professor, Department of Chemistry, T. C. College, Baramati.	Chairman
2	Mr. Shrikrushna T. Salunke Associate Professor, Department of Chemistry T. C. College, Baramati	Internal Member
3	Mr. Bhimrao R. Torane Assistant Professor, Department of Chemistry T. C. College, Baramati	Internal Member
4	Mr. Maharudra A. Dudhe Assistant Professor, Department of Chemistry, T. C. College, Baramati	Internal Member
5	Mr. Ravikiranamrut R. Gandhi Assistant Professor, Department of Chemistry T. C. College, Baramati	Internal Member
6	Mr. Vaibhav P. Landage Assistant Professor, Department of Chemistry T. C. College, Baramati	Internal Member
7	Dr. Yogesh N. Indulkar Assistant Professor, Department of Chemistry T. C. College, Baramati	Internal Member
8	Dr. Rahul S. Bhondwe. Assistant Professor, Department of Chemistry T. C. College, Baramati	Internal Member
9	Dr. Nilam C. Dige Assistant Professor, Department of Chemistry SPPU, Pune	Internal Member
10	Dr. Namdeo N. Bhujbal Associate Professor, Department of Chemistry A. Magar College, Hadapsar, Pune	External Member VC Nominee.
11	Dr. Vijay Vader Associate Professor, Department of Chemistry Solapur University	External Member from other University
12	Dr. D. M. Pore Associate Professor, Department of Chemistry Shivaji University, Kolhapur	External Member from other University
13	Dr. Hanmant Gurav Scientist, Reliance Petrochemicals, Mumbai.	Meritorious Alumni
14	Mr. Nitin Gawade R&D, Manager, Indigo Paints, Mumbai	External Member From Industry
15	Ms. Neha Shinde (T.Y.B.Sc.) T. C. College, Baramati	UG Student
16	Mr. Saurabh Pandhare (T.Y.B.Sc.) T. C. College, Baramati	UG Student
17	Ms. Tejashri Lonkar (M. Sc. II) T. C. College, Baramati	PG Student

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)

Department of Chemistry
Credit Structure B.Sc. 2022 Pattern

Class	Pattern	Semester	Course Code	Course Title	Course Type	No. of Credits
First Year						
F.Y.B.Sc	2022	I	USCH111	Physical and Inorganic Chemistry I	Theory	02
F.Y.B.Sc	2022	I	USCH112	Organic and Inorganic Chemistry I	Theory	02
F.Y.B.Sc	2022	I	USCH113	Chemistry Practical I	Practical	02
F.Y.B.Sc	2022	II	USCH121	Physical and Inorganic Chemistry II	Theory	02
F.Y.B.Sc	2022	II	USCH122	Organic and Inorganic Chemistry II	Theory	02
F.Y.B.Sc	2022	II	USCH123	Chemistry Practical II	Practical	02
			Certificate Course			
Second Year						
S.Y.B.Sc	2022	III	USCH231	Physical and Analytical Chemistry I	Theory	03
S.Y.B.Sc	2022	III	USCH232	Organic and Inorganic Chemistry I	Theory	03
S.Y.B.Sc	2022	III	USCH233	Chemistry Practical III	Practical	02
S.Y.B.Sc	2022	III	Certificate Course	1. Soil and Water Analysis, 2. Instrumental Techniques		02
S.Y.B.Sc	2022	IV	USCH241	Physical and Analytical	Theory	03

				Chemistry I		
S.Y.B.Sc	2022	IV	USCH242	Organic and Inorganic Chemistry I	Theory	03
S.Y.B.Sc	2022	IV	USCH243	Chemistry Practical IV	Practical	02
S.Y.B.Sc	2022	IV	Certificate Course	Titrimetric Analysis		02
Third Year						
T.Y.B.Sc	2022	V	USCH351	Physical Chemistry I	Theory	03
T.Y.B.Sc	2022	V	USCH352	Inorganic Chemistry I	Theory	03
T.Y.B.Sc	2022	V	USCH353	Organic Chemistry I	Theory	03
T.Y.B.Sc	2022	V	USCH354	Analytical Chemistry I	Theory	03
T.Y.B.Sc	2022	V	USCH355	Industrial Chemistry I	Theory	03
T.Y.B.Sc	2022	V	USCH356A	Nuclear Chemistry I	Elective Theory	03
T.Y.B.Sc	2022	V	USCH356B	Polymer Chemistry I	Elective Theory	03
T.Y.B.Sc	2022	V	USCH356C	Introduction to Biochemistry and Molecular Biology I	Elective Theory	03
T.Y.B.Sc	2022	V	USCH356D	Environmental and Green Chemistry I	Elective Theory	03
T.Y.B.Sc	2022	V	USCH356E	Agriculture Chemistry	Elective Theory	03
T.Y.B.Sc	2022	V	USCH356F	Synthesis of Nanomaterials and Nano toxicology	Elective Theory	03
T.Y.B.Sc	2022	V	USCH357	Physical Chemistry Practical I	Practical	02
T.Y.B.Sc	2022	V	USCH358	Inorganic Chemistry Practical I	Practical	02
T.Y.B.Sc	2022	V	USCH359	Organic Chemistry Practical I	Practical	02

T.Y.B.Sc	2022	VI	USCH361	Physical Chemistry II	Theory	03
T.Y.B.Sc	2022	VI	USCH362	Inorganic Chemistry II	Theory	03
T.Y.B.Sc	2022	VI	USCH363	Organic Chemistry II	Theory	03
T.Y.B.Sc	2022	VI	USCH364	Analytical Chemistry II	Theory	03
T.Y.B.Sc	2022	VI	USCH365	Industrial Chemistry II	Theory	03
T.Y.B.Sc	2022	VI	USCH366A	Nuclear Chemistry II	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH366B	Polymer Chemistry II	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH366C	Introduction to Biochemistry and Molecular Biology II	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH366D	Environmental and Green Chemistry II	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH366E	Dairy Chemistry	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH366F	Environmental Nanotechnology and Applications	Elective Theory	03
T.Y.B.Sc	2022	VI	USCH367	Physical Chemistry Practical II	Practical / Project	02
T.Y.B.Sc	2022	VI	USCH368	Inorganic Chemistry Practical II	Practical / Project	02
T.Y.B.Sc	2022	VI	USCH369	Organic Chemistry Practical II	Practical / Project	02

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)

Department of Chemistry
Credit Structure M.Sc. 2022 Pattern

Class	Pattern	Semester	Course Code	Course Title	Course Type	No. of Credits
First Year						
M. Sc. I	2022	I	PSCH111	Physical Chemistry I	Theory	04
M. Sc. I	2022	I	PSCH112	Inorganic Chemistry I	Theory	04
M. Sc. I	2022	I	PSCH113	Organic Chemistry I	Theory	04
M. Sc. I	2022	I	PSCH114	Safety in Chemical Laboratory and Good Laboratory Practices	Theory	04
M. Sc. I	2022	I	PSCH115	Physical Chemistry Practical	Practical	04
M. Sc. I	2022	I	PSCH116	Organic Chemistry Practical	Practical	04
M. Sc. I	2022	II	PSCH121	Physical Chemistry II	Theory	04
M. Sc. I	2022	II	PSCH122	Inorganic Chemistry II	Theory	04
M. Sc. I	2022	II	PSCH123	Organic Chemistry II	Theory	04
M. Sc. I	2022	II	PSCH124	General chemistry	Theory	04
M. Sc. I	2022	II	PSCH125	Inorganic Chemistry Practical	Practical	04
M. Sc. I	2022	II	PSCH126	Analytical Chemistry Practical	Practical	04
			Certificate Course			
Second Year (Organic Chemistry)						
M. Sc. II	2022	III	PSCH0231	Designing of organic synthesis and Heterocyclic Chemistry	Theory	04

M. Sc. II	2022	III	PSCHO-232	Spectroscopic Methods in Structure Determination	Theory	04
M. Sc. II	2022	III	PSCHO-233	Organic Stereochemistry-I and Organic Reaction Mechanism	Theory	04
M. Sc. II	2022	III	PSCHO - 234	Photochemistry, Free radicals and Pericyclic Reactions	Theory	04
M. Sc. II	2022	III	PSCHO-235	Single stage preparations	Practical	04
M. Sc. II	2022	III	PSCHO-236	Double stage preparations	Practical	04
M. Sc. II	2022	III	Certificate Course CCAug22	Instrumental methods for chemical analysis	Theory + Practical	02
M. Sc. II	2022	III	SD:23	Skill Development Course	Theory + Practical	02
M. Sc. II	2022	IV	PSCHO-241	Chemistry of Natural Products-I	Theory	04
M. Sc. II	2022	IV	PSCHO-242	Advanced Synthetic Organic Chemistry	Theory	04
M. Sc. II	2022	IV	PSCHO-243	Biomolecules, Org chemistry of drug design and chiral drugs	Theory	04
M. Sc. II	2022	IV	PSCHO 244	Organic Stereochemistry II and Asymmetric Synthesis	Theory	04
M. Sc. II	2022	IV	PSCHO-245	Innovative experiments in organic chemistry	Practical	04
M. Sc. II	2022	IV	PSCHO-246	Project	Project	04
M. Sc. II	2022	IV	SD:24	Skill Development Course	Theory + Practical	02
Second Year (Inorganic Chemistry)						
M. Sc. II	2022	III	PSCHI 231	Organometallic Chemistry & Homogeneous catalysis	Theory	04
M. Sc. II	2022	III	PSCHI-232	Inorganic reaction mechanism and photochemistry	Theory	04
M. Sc. II	2022	III	PSCHI-233	Physical Methods in	Theory	04

				Inorganic Chemistry		
M. Sc. II	2022	III	PSCHI-234	Bioinorganic and Inorganic medicinal chemistry	Theory	04
M. Sc. II	2022	III	PSCHI-235	Analysis, Estimations and computer applications	Practical	04
M. Sc. II	2022	III	PSCHI 236	Inorganic preparations and Instrumental analysis	Practical	04
M. Sc. II	2022	III	Certificate Course CCAug22	Instrumental methods for chemical analysis	Theory + Practical	02
M. Sc. II	2022	III	SD:23	Skill Development Course	Theory + Practical	02
M. Sc. II	2022	IV	PSCHI-241	Heterogeneous Catalysis and Inorganic polymers	Theory	04
M. Sc. II	2022	IV	PSCHI-242	Material science I: Inorganic materials & solid state chemistry	Theory	04
M. Sc. II	2022	IV	PSCHI-243	Material Science-II: Nanomaterials	Theory	04
M. Sc. II	2022	IV	PSCHI-244	Inorganic applications in industrial and environmental chemistry	Theory	04
M. Sc. II	2022	IV	PSCHI-245	Extended practicals in Inorganic chemistry	Practical	04
M. Sc. II	2022	IV	PSCHI-246	Project work	Project	04
M. Sc. II	2022	IV	SD:24	Skill Development Course	Theory + Practical	02
Second Year (Analytical Chemistry)						
M. Sc. II	2022	III	PSCHA-231	Analytical Method Development & Validation, Nanotechnology	Theory	04
M. Sc. II	2022	III	PSCHA-232	Electrochemical Methods and Food Analysis	Theory	04
M. Sc. II	2022	III	PSCHA-233	Pharmaceutical Analysis	Theory	04

M. Sc. II	2022	III	PSCHA-234	Characterization Techniques	Theory	04
M. Sc. II	2022	III	PSCHA-235	Analysis of Materials	Practical	04
M. Sc. II	2022	III	PSCHA-236	Instrumental Analysis	Practical	04
M. Sc. II	2022	III	Certificate Course CCAug22	Instrumental methods for chemical analysis	Theory + Practical	02
M. Sc. II	2022	III	SD23	Skill Development Course	Theory + Practical	02
M. Sc. II	2022	IV	PSCHA-241	Forensic science	Theory	04
M. Sc. II	2022	IV	PSCHA-242	Advances in Analytical Techniques	Theory	04
M. Sc. II	2022	IV	PSCHA 243	Analytical methods for Analysis of fertilizers, detergents, Water, and Polymer, Paint and pigment	Theory	04
M. Sc. II	2022	IV	PSCHA-244	Method of Analysis and Applications	Theory	04
M. Sc. II	2022	IV	PSCHA-245	Analysis of pharmaceutical, food and Bio- analytical samples	Practical	04
M. Sc. II	2022	IV	PSCHA-246	Project work	Project	04
M.Sc. II	2022	IV	SD:24	Skill Development Course	Theory + Practical	02

MINUTES OF THE MEETING

As per the Notice issued by the college, the meeting of Board of Studies in Chemistry was successfully held on **12th April 2022** at 12:00 noon via online / off-line mode. The meeting took place as per the guidelines and protocols set by the college and Govt. of Maharashtra due to COVID-19 situation under the guidance of Mr. Sanjay R. Kale, Chairman of the Board of Studies in Chemistry. The meeting commenced with a warm welcome to all the esteemed members, followed by a brief introduction of the meeting's objectives.

During the meeting, fruitful discussions were held on the items mentioned in the circulated agenda. We are pleased to inform you that the following resolutions were made during the BOS meeting.

1. To confirm the minutes of the previous meeting held on 17th October 2021.

Mr. Sanjay R. Kale read the minutes of the BOS meeting held on 17th October 2021 put forward to the BOS members for the approval. All members agreed and confirmed it without any corrections.

Resolution No. 1: The minutes of the previous Board of Studies meeting were approved and confirmed.

2. To design and approve course and credit structure for the B.Sc. and M. Sc. programme in accordance with 2022 pattern.

The course and credit structure for the B.Sc. and M.Sc. programme in accordance with 2022 pattern was prepared by the faculty members as per guidelines set by the college and University. The detailed distribution of credits allotted to each course/subject for B.Sc. and M. Sc. programme is represented in it. Mr. Sanjay R. Kale, Chairman informed and explained this item to all the members. After the discussion it was approved.

Resolution No. 2: The course and credit structure for the B.Sc. and M. Sc. programme (2022 pattern) has been unanimously approved by all members of the BOS.

3. To prepare and approve curriculum of F.Y.B.Sc. Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.

The Board of Studies (BOS) members meticulously designed and crafted the curriculum for Semester I of the F.Y.B. Sc program well in advance of the BOS meeting. This preliminary draft was then shared with all BOS members for their input and suggestions to enhance its quality. During the meeting, Mr. R. R. Gandhi presented the curriculum on a course-by-course basis, and the recommendations and valuable insights provided by the BOS members were thoughtfully incorporated into the curriculum. Dr. N. N. Bhujbal suggested some additions in the syllabus of USCH 112. After discussion these additions were incorporated and sanctioned.

In light of the constructive suggestions offered by the BOS members, the curriculum structure underwent necessary revisions. After thorough deliberation and careful consideration, the curriculum of following courses was presented for approval during the BOS meeting.

Credit Structure B.Sc. 2022 Pattern

Class	Pattern	Semester	Course Code	Course Title	Course Type	No. of Credits
First Year						
F.Y.B.Sc	2022	I	USCH111	Physical and Inorganic Chemistry I	Theory	02
F.Y.B.Sc	2022	I	USCH112	Organic and Inorganic Chemistry I	Theory	02
F.Y.B.Sc	2022	I	USCH113	Chemistry Practical I	Practical	02

Resolution No. 3: The curriculum for F.Y.B.Sc. Semester-I (2022 pattern) has been unanimously approved by all members of the BOS.

4. To prepare and approve curriculum of M.Sc. Semester-I (2022 pattern) to be implemented from the academic year 2022-2023.

The Board of Studies (BOS) members meticulously designed and crafted the curriculum for Semester I of the M. Sc program (2022 Pattern) well in advance of the BOS meeting. This preliminary draft was then shared with all BOS members for their input and suggestions to enhance its quality. During the meeting, Mr. B. R. Torane presented the curriculum on a course-by-course basis, and the recommendations and valuable insights provided by the BOS members were thoughtfully incorporated into the curriculum. Dr. D. M. Pore suggested some additions in the syllabus of PSCH 113. Dr. Vader explained need of some additional topics in

the curriculum of course PSCH 112 while Dr. Gurav and Mr. Gawade some additional experiments in Practical courses. After discussion on these suggested inclusions, some minor changes were incorporated in the respective syllabi.

In light of the constructive suggestions offered by the BOS members, the curriculum structure underwent necessary revisions. After thorough deliberation and careful consideration, the curriculum of following courses was presented for approval during the BOS meeting.

Credit Structure M.Sc. 2022 Pattern

Class	Pattern	Semester	Course Code	Course Title	Course Type	No. of Credits
First Year						
M.Sc I	2022	I	PSCH111	Physical Chemistry I	Theory	04
M.Sc I	2022	I	PSCH112	Inorganic Chemistry I	Theory	04
M.Sc I	2022	I	PSCH113	Organic Chemistry I	Theory	04
M.Sc I	2022	I	PSCH114	Safety in Chemical Laboratory and Good Laboratory Practices.	Theory	04
M.Sc I	2022	I	PSCH115	Physical Chemistry Practical	Practical	04
M.Sc I	2022	I	PSCH116	Organic Chemistry Practical	Practical	04

Resolution No. 4: The curriculum for M.Sc. Semester-I (2022 pattern) has been unanimously approved by all members of the BOS.

5. To prepare and approve curriculum of certificate courses for UG and PG programme as per 2022 pattern.

The curriculum of certificate courses for PG programme was prepared and presented to BOS members. The detail syllabus of certificate course, "Instrumental methods of Chemical Analysis" was explained by Dr. R. S. Bhondwe, coordinator. Dr. N. N. Bhujbal suggested that, the more practicals related to this course are to be carried out as it is very beneficial to the students. All members agreed the same and the syllabus and structure of the course (theory and practicals) was approved and forwarded to Academic council.

Class	Pattern	Sem	Code	Title and Topics	Nature	Credit points
M. Sc. I	2022	I	CC-1	Instrumental methods of Chemical Analysis	Theory and Practical	02

Resolution No. 5: The curriculum for certificate courses for UG and PG programme has been unanimously approved by all members of the BOS.

6. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum.

The feedback and suggestions from different stakeholders was considered while designing the credit format for UG programme and preparation of curriculum for F.Y.B.Sc. Sem I (2022 pattern) and M.Sc. I, Sem I (2022 pattern) The BOS members reviewed the relevant feedback and suggestions from the students, alumni, teacher, parents and employers. Accordingly, these inclusions and modifications were incorporated in the curriculum after approval of BOS members.

Resolution No. 6: The relevant modifications have been unanimously approved by all the BOS members.

7. Any other issue with the permission of the chair.

As there were no any other subject/topic raised by BOS member, the meeting was ended with vote of thanks by the Chairman to all members for their valuable cooperation.



Chairman
Board of Studies in Chemistry

Head
DEPARTMENT OF CHEMISTRY
Tuljaram Chaturchand College
Baramati (Dist.Pune)



IQAC
Coordinator
Coordinator

Internal Quality Assurance Cell
Tuljaram Chaturchand College of
Arts, Science and Commerce,
Baramati (Pune)-413102



Principal
Principal
Tuljaram Chaturchand College
Baramati