Anekant Education Society's

Tuljaram Chaturchand College of Arts, Science, Commerce, Baramati

(Autonomous)

DEPARTMENT OF PHYSICS

(Faculty of Science and Technology)

Minutes of Board of Studies Meeting No.1

Date of Meeting: 03/04/2019

Venue: Department of Physics

April, 2019

Anekant Education Society's

Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati

(Autonomous)

Department of Physics

NOTICE

Date: 15/03/2019

Board of Studies Meeting

The meeting of all the members of Board of Studies in Physics is arranged on Wednesday, 03/04/2019 at 11.30 a.m. All the members are requested to attend and actively participate in the meeting. As esteemed members of the board, your presence and suggestions during the meeting would be greatly appreciated.

The agenda for the meeting is as follows:

1. To design and approve course and credit structure for the B.Sc. and M. Sc. programme in accordance with 2019 pattern.
2. To prepare and approve curriculum of F.Y.B.Sc, Semester-I (2019 pattern) to be implemented from the academic year 2019-2020.
3. To prepare and approve curriculum of M.Sc.-I, Semester-I (2019 pattern) to be implemented from the academic year 2019-2020.
4. To prepare and approve curriculum of certificate courses for UG and PG programmes as per 2019 pattern.
5. To discuss and incorporate the relevant feedbacks of the stakeholders (students, teachers, parents, alumni and employers) in the curriculum.
6. Any other issue with the permission of the chair.

Therefore, I kindly request you all to attend the aforementioned meeting and invite you to provide your valuable inputs for the designing the curriculum in accordance with 2019 pattern.

Chairman
BOS in Physics

TULJARAM CHATURCHAND COLLEGE BARAMATI

Principal

Anekant Education Society's

Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati

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Department of Physics

List of Members Presented for the BOS Meeting

The following internal and external BoS members were attended the Board of Studies (Physics) meeting held on 03th April, 2019.

Sr. No	Name	Designation
1	Dr. Maruti Kokare	Chairman
2	Prof. Dr. Sanjay Dhole	Member, Expert from SPPU, Pune
3	Prof. Dr. Keshav Rajpure	Member, Expert from Shivaji University, Kolhapur
4	Prof. Dr. Vikas Patil	Member, Expert from Punyashlok Ahilyadevi Holkar Solapur University
5	Mr. Vinayal Kakade	Representative from Industry
6	Dr. Swapnil Rajoba	Meritorious Alumni
7	Dr. Pandurang Pingale	Member
8	Dr. Ashok Kalange	Member
9	Dr. Rajendra Kale	Member
10	Dr. Ramchandra Sapkal	Member
11	Dr. Sachin Kulkarni	Member
12	Mr. Sandip Kakade	Member
13	Dr. Vijay Mohite	Member
14	Mr. Balbhim Maharnavar	Member
15	Miss.Kulkarni Swati	Student Representative
16	Miss.Ingole S. M.	Student Representative

MINUTES OF THE MEETING

The first Meeting of Board of Studies in Physics was held on 03rdApril 2019 at 11:30 am in Department of Physics, T. C. College, Baramati. The meeting took place in the offline mode, adhering to the guidelines and protocols set by the college. Under the guidance of Dr. M. K. Kokare, Chairman of the Board of Studies in Physics, 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 design and approve course and credit structure for the B.Sc. and M. Sc. programme in accordance with 2019 pattern.

The Chairman of BoS Dr.Maruti Kokare has provided an overview of the 2019 pattern and emphasized its significance in curriculum development. The members discussed key features and any potential challenges associated with its implementation. A detailed discussion took place regarding the course and credit structure of the B.Sc and M.Sc. programmes.

The Chairman presented a proposal for the course and credit structure. The board of studies discussed on the academic framework for UG & PG program. After detailed discussion this framework was finalised.

Course Structure for B. Sc. Physics

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
FYBSc						
FYBSc	2019	I	PHY1101	Mechanics and Properties of Matter	Theory	2
FYBSc	2019	I	PHY1102	Electromagnetics	Theory	2
FYBSc	2019	I	PHY1103	Practical-I	Practical	2
FYBSc	2019	II	PHY1201	Heat and Thermodynamics	Theory	2
FYBSc	2019	II	PHY1202	Waves and Optics	Theory	2
FYBSc	2019	II	PHY1203	Practical-II	Practical	2
FYBSc	2019	II	CC	Certificate Course	CC	2
SYBSc						

SYBSc	2019	III	PHY2301	Electronics-I/Instrumention	Theory	3
SYBSc	2019	III	PHY2302	Thermal Physics	Theory	3
SYBSc	2019	III	PHY2303	Practical-I	Practical	2
SYBSc	2019	III	CC	Certificate Course	CC	2
SYBSc	2019	IV	PHY2401	Mathematical Methods in Physics-I	Theory	3
SYBSc	2019	IV	PHY2402	Elements of Modern Physics	Theory	3
SYBSc	2019	IV	PHY2403	Practical-II	Practical	2
SYBSc	2019	IV	CC	Certificate Course	CC	2
TYBSc						
TYBSc	2019	V	PHY3501	Mathematical Methods in Physics-II	Theory	3
TYBSc	2019	V	PHY3502	Classical Mechanics	Theory	3
TYBSc	2019	V	PHY3503	Advanced Optics	Theory	3
TYBSc	2019	V	PHY3504	Solid State Physics	Theory	3
TYBSc	2019	V	PHY3505	Atomic and Molecular Physics	Theory	3
TYBSc	2019	V	PHY3506 (A)	Elements of Material Science	Elective Theory	3
			PHY3506 (B)	Renewable Energy Sources		
			PHY3506 (C)	Physics and Technology Sensors		
TYBSc	2019	V	PHY3507	Practical-I	Practical	2
TYBSc	2019	V	PHY3508	Practical-II	Practical	2
TYBSc	2019	V	PHY3509	Project-I	Practical	2
TYBSc	2019	V	CC	Certificate Course	CC	2
TYBSc	2019	VI	PHY3601	Classical Electrodynamics	Theory	3
TYBSc	2019	VI	PHY3602	Quantum Mechanics	Theory	3
TYBSc	2019	VI	PHY3603	Stastical Physics	Theory	3
TYBSc	2019	VI	PHY3604	Nuclear Physics	Theory	3
TYBSc	2019	VI	PHY3605	Electronics-II/Advanced Electronics	Theory	3
TYBSc	2019	VI	PHY3606 (A)	Physics of Nanomaterials	Elective Theory	3
			PHY3606 (B)	Solar Energy Conversion Devices		
			PHY3606 (C)	Sensors and its Applications		
TYBSc	2019	VI	PHY3607	Practical-III	Practical	2
TYBSc	2019	VI	PHY3608	Practical-IV	Practical	2
TYBSc	2019	VI	PHY3609	Project-II	Project	2

Course Structure for M.Sc. Physics

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
MSc – I						
MSc – I	2019	I	PHY4101	Mathematical Methods in Physics	Theory	4
MSc – I	2019	I	PHY4102	Classical Mechanics	Theory	4
MSc – I	2019	I	PHY4103	Quantum Mechanics-I	Theory	4
MSc – I	2019	I	PHY4104	Electronics	Theory	4

MSc – I	2019	I	PHY4105	Electronics Laboratory-I	Practical	4
MSc – I	2019	I	PHY4106	Basic Physics Laboratory-I	Practical	4
MSc – I	2019	II	PHY4201	Physics of Semiconductor Devices	Theory	4
MSc – I	2019	II	PHY4202	Atoms, Molecules & Laser	Theory	4
MSc – I	2019	II	PHY4203	Quantum Mechanics-II	Theory	4
MSc – I	2019	II	PHY4204	Electrodynamics	Theory	4
MSc – I	2019	II	PHY4205	Electronics Laboratory-II	Practical	4
MSc – I	2019	II	PHY4206	Basic Physics Laboratory-II	Practical	4
			CC	Certificate Course	--	2
MSc – II						
MSc – II	2019	III	PHY5301	Statistical Physics	Theory	4
MSc – II	2019	III	PHY5302	Solid State Physics	Theory	4
MSc – II	2019	III	PHY5303	CB Group –I 1) Physics of thin films-I 2) Electronic Instrumentation-I 3) Biomedical Instrumentation-I	Elective Theory	4
MSc – II	2019	III	PHY5404	CB Group –II 1) Laser-I 2) Nano-technology-I 3) Energy Studies-I 4) Microcontroller– I	Elective Theory	4
MSc – II	2019	III	PHY5405	Special Lab-I	Practical	4
MSc – II	2019	III	PHY5406	Project-I	Practical	2
MSc – II	2019	III	CC	Certificate Course	--	2
MSc – II	2019	III	SD	Skill Development Course	--	2
MSc – II	2019	IV	PHY5401	Nuclear & Particle Physics	Theory	4
MSc – II	2019	IV	PHY5402	Material Science	Theory	4
MSc – II	2019	IV	PHY5403	CB Group –III 1) Physics of thin films-II 2) Electronic Instrumentation-II 3) Biomedical Instrumentation-II	Elective Theory	4
MSc – II	2019	IV	PHY5404	CB Group –IV 1) Laser-II 2) Nano-technology-II 3) Energy Studies-II 4) Microcontroller– II	Elective Theory	4
MSc – II	2019	IV	PHY5405	Special Lab II	Practical	4
MSc – II	2019	IV	PHY5406	Project-II	Project	2
MSc – II	2019	IV	SD	Skill Development Course	--	2

Resolution No. 1: The course and credit structure for the B.Sc and M. Sc. programme in accordance with 2019 pattern has been unanimously approved by all members of the BOS.

2. To prepare and approve curriculum of F.Y.B.Sc, Semester-I (2019 pattern) to be implemented from the academic year 2019-2020

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, Dr.Ashok Kalange presented the curriculum of F.Y.B.Sc course and the recommendations and valuable insights provided by the BoS members were thoughtfully incorporated into the curriculum.

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

Class	Pattern	Semester	Course Code	Course Title	No of Credits
FYBSc	2019	I	PHY1101	Mechanics & Properties of Matter	2
FYBSc	2019	I	PHY1102	Electromagnetics	2
FYBSc	2019	I	PHY1103	Practical-I	2

Resolution No. 2: The curriculum for F.Y.B.Sc, Semester-I (2019 pattern) has been unanimously approved by all members of the BoS.

3. To prepare and approve curriculum of M.Sc.-I, Semester-I (2019 pattern) to be implemented from the academic year 2019-2020

The Board of Studies (BoS) members meticulously designed and crafted the curriculum for M.Sc.-I Semester-I (2019 pattern) 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, Dr.Rajendra Kale 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. During the

discussion, some minor changes were suggested by the board members. The board thoroughly discussed and finalized the syllabus for the courses of M.Sc. Part-I, Semester-I.

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.

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
MSc – I						
MSc – I	2019	I	PHY4101	Mathematical Methods in Physics	Theory	4
MSc – I	2019	I	PHY4102	Classical Mechanics	Theory	4
MSc – I	2019	I	PHY4103	Quantum Mechanics-I	Theory	4
MSc – I	2019	I	PHY4104	Electronics	Theory	4
MSc – I	2019	I	PHY4105	Electronics Laboratory-I	Practical	4
MSc – I	2019	I	PHY4106	Basic Physics Laboratory-I	Practical	4
MSc – I	2019	II	PHY4201	Physics of Semiconductor Devices	Theory	4

Resolution No. 3: The curriculum for M.Sc-I Semester-I (2019 pattern) has been unanimously approved by all members of the BoS.

4.To prepare and approve curriculum of certificate courses for UG and PG programmes as per 2019 pattern.

The proposed curriculum for certificate courses for UG and PG programmes as per the 2019 pattern was presented by Dr. Sachin Kulkarni. Members provided feedback on the proposed structure, addressing concerns and suggesting modifications. A collaborative discussion ensued to refine the proposal and ensure alignment with academic standards and institutional goals. After discussions and necessary modifications made and approve the curriculum.

Department of physics has decided to conduct the certificate course as follows

Certificate Course	No. of Credits	Name of the Teacher	UG/ PG
Renewable Energy Resources	2	Dr. V.S.Mohite	UG
Online Certificate Course on Classical Mechanics by Prof. Dr. H. C. Varma, IIT, Kanpur	4	Dr. Swapnil Rajoba	PG

Resolution No. 4: The curriculum for of certificate courses for UG and PG programmes as per 2019 pattern has been unanimously approved by all members of the BoS.

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

The Chairman initiated the discussion by highlighting the importance of incorporating feedback from both Alumni and current students in the syllabus design process. The department created a curriculum feedback form and distributed it to students, teachers, parents, alumni and employers. Subsequently, the stakeholders filled out the feedback forms. It was noted that their insights and suggestions would greatly contribute to creating a curriculum that aligns with the needs and expectations of the students. Therefore, the BOS members reviewed the feedback and suggestions given by the alumni and students and incorporated the relevant suggestions into the curriculum of F.Y.B.Sc and M.Sc. Physics.

Resolution No. 5: Considered and Approved

6. Any other matter with the consent of Chairperson

During discussion of the syllabus of above motioned courses, the BoS members Prof. Dr. Sanjay Dhole, Prof. Dr. Keshav Rajpure, Prof. Dr. Vikas Patil have given suggestions regarding some new techniques to be introduced in the syllabus as per the NET / SET and Competitive Exams in Physics. Also some reference books are suggested in the UG / PG syllabi. We have made changes to the syllabi accordingly of all the mentioned courses.

Resolution No. 6: Considered and Approved

All the subjects on the agenda were discussed in the meeting, so no issue was raised by any of BOS members.

Meeting was ended with the vote of thanks proposed by Dr. R.D. Kale

Chairman
Board of Studies

IQAC
Coordinator

Principal

Coordinator
Internal Quality Assurance Cell
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TULJARAM CHATURCHAND COLLEGE BARAMATI