



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

**DEPARTMENT OF STATISTICS**

(Faculty of Science and Technology)

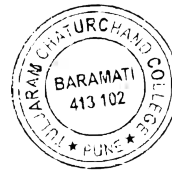
**Minutes of Board of Studies Meeting No.1**

**Date of Meeting: 08/04/2019**

**Venue: Department of Statistics**

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**April, 2019**



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

Department of Statistics

NOTICE

Date: 29/03/2019


Board of Studies Meeting

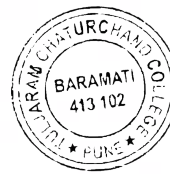
All members of the Board of Studies are hereby informed that, our BoS meeting is organised on 08/04/2019 at 11.00 am, in the staff room of department of Statistics. As esteemed members of the board, your presence and suggestions during the meeting would be greatly appreciated.

The agenda of the meeting included the following subjects:

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., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. 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 Statistics



  
Principal

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

**Department of Statistics**

**List of Members Presented for the BOS Meeting**

The following internal and external BoS members were attended the Board of Studies (Statistics) meeting held on 08<sup>th</sup> April, 2019.

Sr. No.	Name	Designation
1.	Dr. Avinash S. Jagtap	Chairman
2.	Mr. Vikas C. Kakade	Member
3.	Dr. Neeta K. Dhane	Member
4.	Dr. Vaishali V. Patil	Member
5.	Mr. Chandrashekhar P. Swami	Member
6.	Dr. Jaya L. Limbore	Member
7.	Mrs. Sarita D. Wadkar	Member (Ad hoc)
8.	Ms. Priti M. Mohite	Member (Ad hoc)
9.	Mrs. Trupti S. Arekar	Member (Ad hoc)
10.	Ms. Nilambari A. Jagtap	Member (Ad hoc)
11.	Dr. Akanksha S. Kashikar	Vice-Chancellor Nominee
12.	Dr. Vikas B. Ghute	Expert from other University
13.	Dr. Rajendra G. Gurao	Expert from other University
14.	Mr. Saurabh Kadam	Representative from Industry
15.	Mr. Rohan Koshti	Meritorious Alumni
16.	Mr. Mukunda Dhale	UG Student
17.	Miss. Priya Rakate	UG Student
18.	Miss. Vaishnavee Shinde	PG Student



## MINUTES OF THE MEETING

The first Meeting of Board of Studies in Statistics was held on 08<sup>th</sup> April, 2019 at 11.00 am in Department of Statistics, T. C. College, Baramati. The meeting adhering to the guidelines and protocols set by the college under the guidance of Dr. Avinash S. Jagtap, Chairman of the Board of Studies in Statistics, the meeting commenced with a warm welcome to all the esteemed members, followed by a brief introduction of the meeting's objectives. In this speech before going in details, he focused on Autonomous status of the institution, Framework and role of BoS body, Credit and semester system, Certificate courses, Skill and career based curriculum and How our students can eligible to take admissions in out of state universities of PG as well as M.Phil. and Ph.D. courses.

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., B.Com. F.Y.B.Sc. (Comp. Sci.) and M. Sc. programme in accordance with 2019 pattern.**

The Chairman of BoS Dr. Avinash Jagtap 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., B.Com. F.Y.B.Sc. (Comp. Sci.) and M.Sc. programmes. The following points were considered:

- Core and elective course distribution.
- Credit hours for each course.
- Inclusion of practical components.
- Alignment with industry requirements.
- Opportunities for interdisciplinary studies.

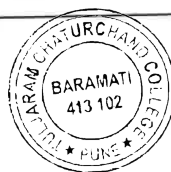
The Chairman presented a proposal for the course and credit structure. The proposal included a breakdown of required courses, elective options, and credit hours for each program.

### Course Structure for B. Sc. STATISTICS

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>FYBSc</b>						
FYBSc	2019	I	STAT1101	Descriptive Statistics- I	Theory	2
FYBSc	2019	I	STAT1102	Discrete Probability and Probability Distributions - I	Theory	2
FYBSc	2019	I	STAT1103	Practical-I	Practical	2



FYBSc	2019	II	STAT1201	Descriptive Statistics-II	Theory	2
FYBSc	2019	II	STAT1202	Discrete Probability and Probability Distributions – II	Theory	2
FYBSc	2019	II	STAT1203	Practical-II	Practical	2
FYBSc	2019	II	CC	Certificate Course	CC	2
<b>SYBSc</b>						
SYBSc	2019	III	STAT2301	Statistical Techniques- I	Theory	3
SYBSc	2019	III	STAT2302	Continuous Probability Distributions-I	Theory	3
SYBSc	2019	III	STAT2303	Practical-I	Practical	2
SYBSc	2019	III	CC	Certificate Course	CC	2
SYBSc	2019	IV	STAT2401	Statistical Techniques- II	Theory	3
SYBSc	2019	IV	STAT2402	Continuous Probability Distributions-II	Theory	3
SYBSc	2019	IV	STAT2403	Practical-II	Practical	2
SYBSc	2019	IV	CC	Certificate Course	CC	2
<b>TYBSc</b>						
TYBSc	2019	V	STAT3501	Distribution Theory	Theory	3
TYBSc	2019	V	STAT3502	Statistical Inference- I	Theory	3
TYBSc	2019	V	STAT3503	Sampling Methods	Theory	3
TYBSc	2019	V	STAT3504	Design of Experiments	Theory	3
TYBSc	2019	V	STAT3505	C- Programming	Theory	3
TYBSc	2019	V	STAT3506(A)	Introduction to Stochastic Processes	Elective Theory	3
			STAT3506(B)	Biostatistics		
TYBSc	2019	V	STAT3507	Statistics Practical- V	Practical	2
TYBSc	2019	V	STAT3508	Statistics Practical- VI	Practical	2
TYBSc	2019	V	STAT3509	Statistics Practical- VII	Practical	2
TYBSc	2019	V	CC	Certificate Course	CC	2
TYBSc	2019	VI	STAT3601	Introduction to Regression Analysis	Theory	3
TYBSc	2019	VI	STAT3602	Statistical Inference- II	Theory	3
TYBSc	2019	VI	STAT3603	Statistical Quality Control and Reliability	Theory	3
TYBSc	2019	VI	STAT3604	Operations Research	Theory	3
TYBSc	2019	VI	STAT3605	Statistical Computing Using R- Software	Theory	3
TYBSc	2019	VI	STAT3606(A)	Official Statistics	Elective Theory	3
			STAT3606(B)	Actuarial Statistics		
TYBSc	2019	VI	STAT3607	Statistics Practical- VIII	Practical	2
TYBSc	2019	VI	STAT3608	Statistics Practical- IX	Practical	2
TYBSc	2019	VI	STAT3609	Project	Project	2



**Course Structure for F. Y. B. Sc. (Comp. Sci.) Statistics**

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>FYBSc (Comp. Sci.)</b>						
FYBSc (CS)	2019	I	CSST-1101	Statistical Methods -I	Theory	2
FYBSc (CS)	2019	I	CSST-1102	Probability and some discrete probability distributions	Theory	2
FYBSc (CS)	2019	I	CSST-1103	Practical-I	Practical	2
FYBSc (CS)	2019	II	CSST-1201	Statistical Methods- II	Theory	2
FYBSc (CS)	2019	II	CSST-1202	Statistical Testing of Hypothesis and Use of R Software	Theory	2
FYBSc (CS)	2019	II	CSST-1203	Practical-II	Practical	2
FYBSc (CS)	2019	II	CC	Certificate Course	CC	2

**Course Structure for B.Com. Statistics**

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>FYBCom</b>						
FYBCom	2019	I	COMBS1104(A)	Business Statistics-I	Theory	3
FYBCom	2019	II	COMBS1204(A)	Business Statistics-II	Theory	3
<b>SYBCom</b>						
SYBCom	2019	III	COMBS2306(D)	Business Statistics-III	Theory	3
SYBCom	2019	IV	COMBS2406(D)	Business Statistics-IV	Theory	3
<b>TYBCom</b>						
TYBCom	2019	V	COMBS3505(D)	Business Statistics-III	Theory	3
TYBCom	2019	V	COMBS3506(D)	Business Statistics-IV	Theory	3
TYBCom	2019	VI	COMBS3605(D)	Business Statistics-V	Theory	3
TYBCom	2019	VI	COMBS3606(D)	Business Statistics-VI	Theory	3

**Course Structure for M.Sc. I STATISTICS**

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>MSc - I</b>						
MSc - I	2019	I	STAT-4101	Mathematical Analysis	Theory	4
MSc - I	2019	I	STAT-4102	Linear Algebra	Theory	4
MSc - I	2019	I	STAT-4103	Probability Distributions	Theory	4
MSc - I	2019	I	STAT-4104	Sampling Theory	Theory	4
MSc - I	2019	I	STAT-4105	Practical-I	Practical	4
MSc - I	2019	I	STAT-4106	Practical-II	Practical	4
MSc - I	2019	II	STAT-4201	Probability Theory	Theory	4
MSc - I	2019	II	STAT-4202	Parametric Inference	Theory	4



MSc – I	2019	II	STAT-4203	Multivariate Analysis	Theory	4
MSc – I	2019	II	STAT-4204	Regression Analysis	Theory	4
MSc – I	2019	II	STAT-4205	Practical-III	Practical	4
MSc – I	2019	II	STAT-4206	Practical-IV	Practical	4
			CC	Certificate Course	--	2
<b>MSc – II</b>						
MSc – II	2019	III	STAT-5301	Asymptotic Inference	Theory	4
MSc – II	2019	III	STAT-5302	Design and Analysis of Experiments	Theory	4
MSc – II	2019	III	STAT-5303	Time Series Analysis	Theory	4
MSc – II	2019	III	STAT-5304 (A)	Data Mining	Elective Theory	4
			STAT-5304 (B)	Design and Analysis of Clinical Trials		
			STAT-5304 (C)	Optimization Techniques		
MSc – II	2019	III	CC	Certificate Course	--	2
MSc – II	2019	III	SD	Skill Development Course	--	2
MSc – II	2019	III	STAT-5305	Practical-V	Practical	4
MSc – II	2019	III	STAT-5306	Practical-VI	Practical	4
MSc – II	2019	IV	STAT-5401	Stochastic Processes	Theory	4
MSc – II	2019	IV	STAT-5402	Statistical Process Control	Theory	4
MSc – II	2019	IV	STAT-5403	Survival Analysis	Theory	4
MSc – II	2019	IV	STAT-5404 (A)	Actuarial Statistics	Elective Theory	4
			STAT-5404 (B)	Reliability Theory		
			STAT-5404 (C)	Statistical Analysis of Micro-Array Data		
MSc – II	2019	IV	STAT-5405	Practical-VII	Practical	4
MSc – II	2019	IV	STAT-5406	Project	Project	4
MSc – II	2019	IV	SD	Skill Development Course	--	2

**Resolution No. 1:** The course and credit structure for the B.Sc., B.Com. F.Y.B.Sc. (Comp. Sci.) 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., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. 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., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. 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. Viaks Kakde presented the curriculum of F.Y.B.Sc., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. course-by-course basis,



and the recommendations and valuable insights provided by the BoS members were thoughtfully incorporated into the curriculum. Dr. Rajendra Gurao and Mr. Saurabh Kadam specifically recommended maintaining consistency in the sub-points of all chapters.

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	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>FYBSc</b>						
FYBSc	2019	I	STAT1101	Descriptive Statistics- I	Theory	2
FYBSc	2019	I	STAT1102	Discrete Probability and Probability Distributions - I	Theory	2
FYBSc	2019	I	STAT1103	Practical-I	Practical	2
<b>FYBSc (Comp. Sci.)</b>						
FYBSc (CS)	2019	I	CSST-1101	Statistical Methods -I	Theory	2
FYBSc (CS)	2019	I	CSST-1102	Probability and some discrete probability distributions	Theory	2
FYBSc (CS)	2019	I	CSST-1103	Practical-I	Practical	2
<b>FYBCom</b>						
FYBCom	2019	I	COMBS1104(A)	Business Statistics-I	Theory	3

**Resolution No. 2:** The curriculum for F.Y.B.Sc., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. 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, Mr. Chandrashekhar Swami 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
<b>MSc – I</b>						
MSc – I	2019	I	STAT-4101	Mathematical Analysis	Theory	4
MSc – I	2019	I	STAT-4102	Linear Algebra	Theory	4
MSc – I	2019	I	STAT-4103	Probability Distributions	Theory	4
MSc – I	2019	I	STAT-4104	Sampling Theory	Theory	4
MSc – I	2019	I	STAT-4105	Practical-I	Practical	4
MSc – I	2019	I	STAT-4106	Practical-II	Practical	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. Neeta Dhane. 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.

Certificate Course	No. of Credits	Name of the Teacher	UG/PG
Statistics for Management Studies	2	Dr. N. K. Dhane	UG
Quantitative Biology	2	Dr. A. S. Jagtap	UG
Basic Python	2	Prof. C. P. Swami	PG
Basic SPSS	2	Dr. V. V. Patil	PG
Research Methodology	2	Prof. V. C. Kakade	PG

**Resolution No. 3:** 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,



and the recommendations and valuable insights provided by the BoS members were thoughtfully incorporated into the curriculum. Dr. Rajendra Gurao and Mr. Saurabh Kadam specifically recommended maintaining consistency in the sub-points of all chapters.

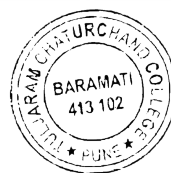
In light of the constructive suggestions offered by the BoS members, the curriculum structure underwent necessary corrections. After thorough deliberation and careful consideration, the curriculum of following courses was presented for approval during the BoS meeting.

Class	Pattern	Sem	Course Code	Course Title	Course Type	No. of Credits
<b>FYBSc</b>						
FYBSc	2019	I	STAT1101	Descriptive Statistics- I	Theory	2
FYBSc	2019	I	STAT1102	Discrete Probability and Probability Distributions - I	Theory	2
FYBSc	2019	I	STAT1103	Practical-I	Practical	2
<b>FYBSc (Comp. Sci.)</b>						
FYBSc (CS)	2019	I	CSST-1101	Statistical Methods -I	Theory	2
FYBSc (CS)	2019	I	CSST-1102	Probability and some discrete probability distributions	Theory	2
FYBSc (CS)	2019	I	CSST-1103	Practical-I	Practical	2
<b>FYBCom</b>						
FYBCom	2019	I	COMBS1104(A)	Business Statistics-I	Theory	3

**Resolution No. 2:** The curriculum for F.Y.B.Sc., F.Y.B.Sc. (Comp. Sci.), F.Y.B.Com. 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, Mr. Chandrashekhar Swami 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
<b>MSc – I</b>						
MSc – I	2019	I	STAT-4101	Mathematical Analysis	Theory	4
MSc – I	2019	I	STAT-4102	Linear Algebra	Theory	4
MSc – I	2019	I	STAT-4103	Probability Distributions	Theory	4
MSc – I	2019	I	STAT-4104	Sampling Theory	Theory	4
MSc – I	2019	I	STAT-4105	Practical-I	Practical	4
MSc – I	2019	I	STAT-4106	Practical-II	Practical	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. Neeta Dhane. 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.

Certificate Course	No. of Credits	Name of the Teacher	UG/PG
Statistics for Management Studies	2	Dr. N. K. Dhane	UG
Quantitative Biology	2	Dr. A. S. Jagtap	UG
Basic Python	2	Prof. C. P. Swami	PG
Basic SPSS	2	Dr. V. V. Patil	PG
Research Methodology	2	Prof. V. C. Kakade	PG

**Resolution No. 3:** 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. Statistics.

**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 Dr. Akanksha S. Kashikar, Dr. Rajendra G. Gurao and Mr. Saurabh Kadam have given suggestions regarding some new techniques to be introduced in the syllabus as per the NET / SET and Competitive Exams in Statistics. In M.Sc.-I syllabi they have suggested to add one extra theory paper (Integral Calculus and Statistical Computing) and to have one practical paper instead of two. 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

Our BoS members Dr. V. B. Ghute and Mr. Rohan Koshti remained absent for the meeting but they have sent their suggestions regarding UG / PG syllabus through e-mail to BoS Chairman. Dr. Avinash S. Jagtap read those suggestions and accordingly relevant changes were made in the syllabi.

Meeting was ended with the vote of thanks proposed by Mr. V. C. Kakade.

  
Chairman  
Board of Studies



  
IQAC  
Coordinator

  
Principal  
Principal  
Tuljaram Chaturchand College  
Baramati