

MATHEMATICS & STATISTICS

Minutes of the 1st BOS Meeting
Held on Thursday, 29th August 2019

Following members were present;

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| 1. Dr. Smitha Jayaram | HOD/Chairperson |
| 2. Dr. Kumudini Das | Member |
| 3. Mrs. Sabitha Praveen | Member |
| 4. Mrs. Sudha Ramesh | Member |
| 5. Mrs. Soly Zachariah | Member |
| 6. Prof. Sampat Vaidya | Subject Expert |
| 7. Ms. Uttara Athawale | Subject Expert |
| 8. Dr. Rajeshwar R. Andhale | Vice Chancellor Nominee |
| 9. Mr. P.V. Ramdev | Industry Expert |
| 10. Ms. Kajal Dhangre | Alumni |
| 11. Dr. Gajanan Wader | Principal |
| 12. Mrs. Deepika Sharma | Vice Principal |

Meeting started at 12.00 noon under the chairmanship of Dr. Smitha Jayaram after self introduction

Agenda 1: To Intimate about Notification Regarding Autonomous Status

The Chairperson welcomed members and presented the following documents awarding Autonomous status to the College

- (a) Report of UGC Expert Committee appointed for evaluation.
- (b) Approval Letter from UGC Dated 2^{4th} June, 2019
Approval Letter from University Dated 1 July, 2019

Agenda 2: To discuss the Pattern of Revision in Syllabus undertaken uniformly by all the subject teachers.

The Board of Studies members reviewed the change in syllabus made by the respective subject teachers related to Mathematics & Statistics subjects. The Chairperson intimated the members that syllabus has been revised to the extent of 5% to 10% changes.

Agenda 3: To discuss and finalize the Revision in Syllabus of subjects under Department of Mathematics & Statistics

- Dr. Rajeshwar Andhale, Vice Chancellor Nominee of University of Mumbai suggested online internal test for 10 Marks.
- Dr. Rajeshwar Andhale, Vice Chancellor Nominee of University of Mumbai suggested introducing certificate Course in Aptitude Test for all the streams.
- Prof. Uttara Athawale, Expert Faculty Specialization, suggested that Maximum mark for each question should vary from 5 mark to 15
- It was also discussed and decided that the question paper pattern will be either / or option.
- Prof. Uttara Athawale, Expert Faculty Specialization, suggested that Baye's Theorem and conditional probability should not be removed from the syllabus.
- Prof. Uttara Athawale, Expert Faculty Specialization, suggested that Multiple Regression Analysis should be introduced in the syllabus of Information Technology and Computer Science.
- Prof. Uttara Athawale, Expert Faculty Specialization, suggested that Error Coding Should be introduced in Discrete mathematics.

After the discussions, the Board approved the revision/changes in the syllabus of following subjects for SEM I, III & V.

**Syllabus Details under Autonomy
B.Sc.I.T.**

| S N | Name of the Subject | Subject Teacher | Topic Added | Topic Removed | Reason for Replacement | Reference for Added Topic | 15 Internal Marks Allocation |
|---------------------|----------------------|-----------------|--------------------------------|--------------------------------------|---|------------------------------|-------------------------------------|
| Semester I | | | | | | | |
| 1 | Discrete Mathematics | Soly Zachariah | Binary Trees | Language if relations and functions | Repeating in the definitions of relations and functions | Susanna S.Epp | Class test (10m) and assignment(5m) |
| Semester III | | | | | | | |
| 1 | Applied Mathematics | Dr.kumudini Das | De Moivers Theorem, Average by | J operator Particular Integral other | The topics added in the syllabus | Applied Mathematics II,P. N. | Assignment (5m) and Class |

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| | | | double integration | method, Solution of simultaneous differential equation by laplace, Differentiation under integral sign | will give a practical knowledge to the students | Wartikar and J. N. Wartikar,Pune VidyathiGraha | Test(10m) |
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Syllabus Details under Autonomy

B.Sc. C.S.

| S . N | Name of the Subject | Subject Teacher | Topic Added | Topic Removed | Reason for Replacement | Reference for Added Topic | 15 Internal Marks Allocation |
|-------------------|--|-----------------|-----------------------------|------------------------------|--|---|--------------------------------------|
| Semester I | | | | | | | |
| 1 | Discrete Mathematics | Sudha Ramesh | Number Theory | Intersection of lines | Number theory is useful in computer algorithms and programming languages | Discrete mathematics and its applications by Kenneth H. Rosen | Class test and assignment |
| 2 | Descriptive Statistics and introduction to Probability | Sabitha Praveen | Permutation and combination | Coefficient of determination | Permutation and combination is the base for probability | Gupta, S.C. and Kapoor, V.K. (1987): Fundamental Statistics, S. Chand and Sons, New Delhi | Class test (10m) and assignment (5m) |

Semester III

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| 1 | Combinatorics and graph theory | Sudha Ramesh | Graph algorithms | Applying probability to combinatorics | Graphs are widely used in softwares | Applied Combinatorics by Mitchel T. Keller | Class test (10m) and assignment (5m) |
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B.Com FINANCIAL MARKETS

Semester - I

| Subject | Professor | Topic Added | Topic Removed | Reason for Replacement | Reference for Added Topic | 15 Internal Marks Allocation |
|----------------------|------------------|---------------------------|-------------------------|---|--------------------------------------|--------------------------------------|
| Business Mathematics | Sudha Ramesh | Matrices and determinants | Shares and mutual funds | Shares and mutual funds is included in other financial subjects | Business Mathematics by A. P. Kumtha | Class test (10m) and assignment (5m) |

Bachelor of Management Studies (B.M.S.)

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| Business Statistics | Dr. Smitha Jayaram | Nil | Probability and Probability Distributions | To be added in the Second Semester as a continuity to nPr & nCr | Business Statistics by A. P. Kumtha | Class Test (10m) + Assignment (5m) |
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Bachelor of Commerce (B.Com.)

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| Business Statistics | Dr. Smitha Jayaram | Probability Theory: Continuous Probability Theory - Binomial, Poisson and Normal Distributions | Shares and Mutual Funds | Topic continuation in the same term under Statistics and Shares and Mutual Fund is a part of finance subject | Probability: An Introduction by Geoffrey Grimmet and Dominic Welsh | Class Test for another Unit (10M) + Assignment for another Unit (5M) |
|---------------------|--------------------|--|-------------------------|--|--|--|

Agenda 4: To discuss and finalize the Question Paper Pattern

The question paper pattern was discussed and finalized with 60:40 pattern, 60 marks for external assessment Semester end exam and 40 marks for internal continuous assessment consisting of a 20 marks class test, 5 marks for active participation in the class & 15 marks- Projects, Presentations, class tests, assignments, etc. The question paper pattern was discussed and finalized as 4 questions of either / or of 15 marks each.

Agenda 5: To approve and recommend changed syllabus to Academic Council

Members of Board of Studies approved the revised syllabus and question paper pattern and recommended the same to be forwarded to the Academic Council for their approval.

Agenda 6: Any other matter with the permission of the chair

Dr. Rajeshwar Andhale, Vice Chancellor Nominee of University of Mumbai advised the Board to introduce B.A. in Statistics courses in the future.

The meeting was dissolved with thanks to the Chair and all the Board of Studies Members.