

**MINUTES OF THE BOARD OF STUDIES MEETING  
DEPARTMENT OF MATHEMATICS**

The 8<sup>th</sup> Board of Studies meeting of the Department of Mathematics was held on 12/12/2018 at 10:30 a.m. in the Chamber of Dean, School of Sciences. The following members attended the meeting.

- |  |   |
|--|---|
| 1. Prof S.N.Hasan                                | Chairman<br>Dean School of Sciences<br>& Head, Department of Mathematics<br>External Member |
| 2. Prof Rajat Tandon                             | External Member   |
| 3. Prof Ayub Khan                                | External Member   |
| 4. Dr. Khaja Moinuddin                           | Member  |
| 5. Dr. Subhash Alha                              | Member  |
| 6. Prof. P. F Rahman,<br>I/C Director DDE, MANUU | Special Invitee   |
| 7. Dr. Syed Waseem Raja                          | Special Invitee   |

The Chairman welcomed all the members of the Board of Studies and broadly explained the purpose of the meeting.

The minutes of the 7<sup>th</sup> Board of Studies meeting of Department of Mathematics were placed and were approved. However the recommendation of Prof V Srinivas made in the 7<sup>th</sup> BoS regarding offering B.Sc. distance mode in semester system was discussed and realised that it may be difficult to implement and the decision has been left to the University Authorities.

The revised syllabus for the specialisation papers for the Ph.D. course-work with effect from academic year 2018-19 was placed and was approved. (Annexure - I)

The members of the board reviewed titles and the syllabus (Annexure - II ) of B.Sc. Mathematics and suggested the following changes:

- It was suggested that Numerical Analysis maybe included as a DSE in the sixth semester of B.Sc. third year of regular mode.
- The Board member strongly suggested that MatLab & Mathematica software may be procured for the use of students. It was suggested that at least two user license of both MatLab & Mathematica should be procured for the Department.

The common panel of paper setters and examiners (Annexure - III) for regular and distance mode were reviewed and approved.

The meeting concluded at 12:45 p.m. with the expression of thanks to all the members from the Chairman.

*Signature*  
\_\_\_\_\_

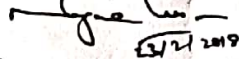


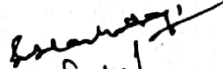

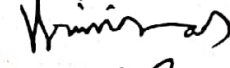

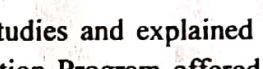
*Rajat Tandon*  
\_\_\_\_\_

*Signature*  
12/12/2018  
Chairman-BoS Mathematics

*Signature*  
\_\_\_\_\_

**MINUTES OF THE BOARD OF STUDIES MEETING  
DEPARTMENT OF MATHEMATICS**

A special board of studies meeting of the Department of Mathematics was held on 23/02/2018 at 4:00 p.m. in the chamber of Dean, School of Sciences. The following members attended the meeting.

- |                                 |   |   |
|---------------------------------|---|---|
| 1. Prof S.N.Hasan               | Chairman<br>Dean School of Sciences<br>& Head, Department of Mathematics<br>External Member |  |
| 2. Prof Rajat Tandon            | Member  |  |
| 3. Dr. Khaja Moinuddin          | Member  |  |
| 6. Dr. Afroz                    | Member  |  |
| 7. Dr. Subhash Alha             | Special Invitee   |  |
| 8. Dr. Syed Waseem Raja         | Special Invitee   |  |
| 8. Prof. V Srinivas, BRAOU      | Special Invitee   |  |
| 9. Dr. Kalesha Vali, DDE, MANUU | Special Invitee   |  |

At the outset the Chairman welcomed all the members of the Board of Studies and explained the purpose of the special BoS meeting. He elaborated on the Distance Education Program offered by DDE, MANUU.

The structure and syllabus of Mathematics, of all the three years, offered through distance education program at MANUU was placed before the board. (Annexure-I)

The members of the board discussed the structure, titles and the syllabus of Mathematics for the B.Sc. distance mode course which is as follows:

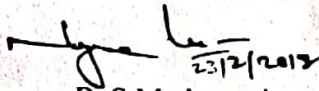
Four papers of Mathematics one each in first and second year and two papers in the third year. Each paper carries 150 marks (100 marks for year-end examination and 50 marks for assignments). The Board approved the entire structure, titles and syllabus.

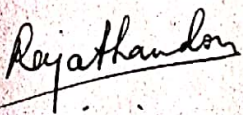
The question paper pattern for the distance mode (Annexure-II) given by the University, was placed before the Board and the members approved the question paper pattern.

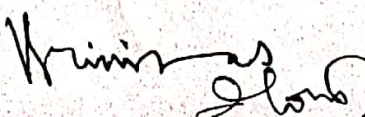
It was agreed that the panel of paper setters and examiners (Annexure-III) of the regular mode may be common for distance mode as well.

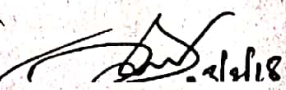
The possibility of designing a common syllabus for regular and distance modes was discussed in detail. Prof V Srinivas strongly suggested that in accordance with the new UGC ODL regulations 2017 both the modes should be equivalent in all aspects viz. inputs, evaluation, training and counselling. He also suggested that the University should plan to move towards CBCS semester system even in the distance programs and practical component may be added in Mathematics papers. It was decided that this would be discussed in detail in the next BoS meeting.

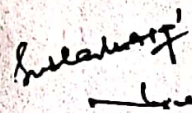
The meeting concluded at 5:15 p.m. with the expression of thanks to all the members from the Chairman.


  
23/2/2018  
Chairman-BoS Mathematics

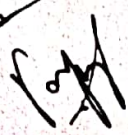






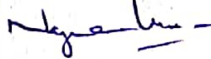
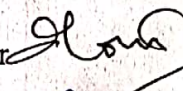







## MINUTES OF THE 6<sup>TH</sup> BOARD OF STUDIES MEETING IN MATHEMATICS

The sixth board of studies meeting of the Department of Mathematics was held on 09/08/2017 at 2:30 p.m. in the chamber of Dean, School of Sciences. The following members attended the meeting.

1. Prof S.N.Hasan	Chairman&Dean School of Sciences 
2. Prof Rajat Tandon	External Member
3. Prof Ayub Khan	External Member
4. Prof Ahmed Waheedullah	Special Invitee
5. Dr. Khaja Moinuddin	Member 
6. Dr. Afroz	Member 
7. Dr. Subhash Alha	Member

At the outset the Chairman welcomed all the members of the Board of Studies and explained the CBCS structure adopted by the University and briefly described the courses offered by the Department. The agenda items were discussed at length and the committee resolved the following issues:


1. The minutes of the 5<sup>th</sup> board of studies were discussed in detail and all the minutes were confirmed by the board members.
2. The members of the board discussed the structure, titles and the syllabus of the M.Sc Mathematics (CBCS 2016-18 & 2017 onward) placed before them in detail and approved the entire structure, titles and syllabus with two suggestions.
  - a. Presently, only one course in Real Analysis is being taught to M.Sc students. The Board members suggested to have two courses in Real Analysis Sem-1: Real Analysis I and Sem-2: Real Analysis II (Measure Theory) (For 2017 batch onwards)
  - b. The members also suggested some minor changes in Linear Algebra syllabus.

The structure, titles and syllabus prepared as per the discussions are placed as Annexure: A, B, C and D.

The two Generic Elective papers (for PG programs) offered by Mathematics Department are (i) Essential Mathematics and (ii) Basic Statistics. The syllabii for these papers were discussed and approved by the Board (Placed as Annexure-E).

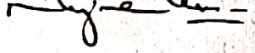

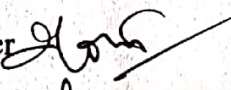

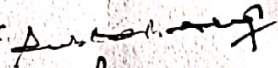
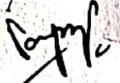
3. The structure, titles and syllabus of B.Sc I, II and III year (General, CBCS 2016-19) were thoroughly discussed by the board members and approved as per the Annexure-F & G. The Board members recommended addition of Linear Algebra course as DSE at V semester and moving LPP from V to VI semester.
4. The board members approved the titles and syllabus of B.Sc III year (Gen/Honors) of 2015-18 batch as placed as Annexure-H.
5. The board members approved the question paper pattern given by the University as placed as Annexure-I.
6. The panel of paper setters and examiners is updated and approved by the board placed as Annexure-J.
7. The board members welcomed the idea of the introduction of MOOCs as non-CGPA 2 credit courses for B.Sc. and M.Sc. students and approved the list of courses placed as Annexure-K.
8. The Board members approved two faculty members (i) Dr. Khaja Moinuddin and (ii) Dr. Subhash Alha of the Department of Mathematics, to be research supervisors for the Ph.D. program at the Department of Mathematics from the academic year 2018-19, in their respective areas of research, as they fulfilled the eligibility criteria for supervisorship laid by the University.

The meeting concluded at 5.15 p.m. with the expression of thanks to all the members from the Chairman.

  
Chairman-BoS Mathematics

## MINUTES OF THE 5<sup>TH</sup> BOARD OF STUDIES IN MATHEMATICS

The fifth Board of Studies meeting of the department of Mathematics was held on 25/02/2016 at 2:00 p.m. in the committee room of the VIP Guest House, MANUU. The following members attended the meeting:

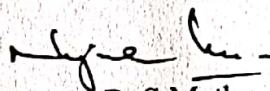
1. Prof S.N.Hasan	Chairman 
2. Prof P.F.Rahman	Member & Dean School of Sciences
3. Prof Rajat Tandon	External Member 
4. Prof Ayub Khan	External Member
5. Prof Ahmed Waheedullah	External Member
6. Mr. Khaja Moinuddin	Member 
7. Dr. Afroz	Member 
8. Mr. Subhash Alha	Member 
9. Mr. Syed Waseem Raja	Member 

At the outset the Chairman welcomed all the members of the Board of Studies and explained briefly about the courses offered by the department and the agenda items were discussed at length and the committee resolved the following issues:

- 1. Confirmation of the minutes of the 4<sup>th</sup> BoS:** The Structure and syllabus recommended for the B.Sc I and II years are confirmed. The M.Sc Mathematics course is restructured and the syllabi for the new titles Calculus of Variations and Integral Equations and Classical Mechanics are approved.
- 2. Structure and Syllabus of B.Sc III (Hons) :** Chairman in consultation with the board members finalized the syllabus and structure of B.Sc Honors for the 2014-17 batch.
- 3. Structure and syllabus of B.Sc (CBCS 2015-16 Batch):** The structure and syllabi of the B.Sc CBCS batch is approved and it has been decided to adapt the syllabus of Delhi University <sup>UGC</sup> with some modifications.
- 4. Restructure of I and II sem M.Sc:** The Board approved to shift Real Analysis of II sem to I sem and Calculus of Variations of I sem to the II sem.
- 5. Bridge course:** Semester I and II syllabus of Bridge course(Mathematics) for admission into the B.Sc programme is approved with a few additions suggested by Prof. Rajat Tandon.

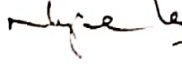
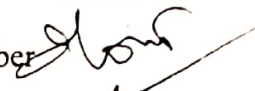

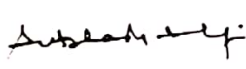

6. **Merging of B.Sc II Honors with B.Sc III General:** The feasibility of merging Mathematics B.Sc II Honors titles and syllabi with B.Sc III General course is discussed and kept pending (to be discussed in the next Board)
7. The Board recommended that from academic year 2016-2017 CBCS pattern of UGC will be followed in totality.
8. **Recommendation of 2 to 3 additional faculty member for the Department:** The Board strongly recommended to have two to three additional faculty member in the department in areas of the need of the department.

Finally the meeting concluded at 3.30 p.m. with the thanks to all the members from the Chairman.

  
Chairman-BoS Mathematics

## MINUTES OF THE 4<sup>TH</sup> BOARD OF STUDIES IN MATHEMATICS

The fourth Board of Studies meeting of the Department of Mathematics was held on 02/03/2015 at 10:30 am in the committee room of the VIP Guest House, MANUU. The following members attended the meeting:

1. Prof S.N.Hasan	Chairman 
2. Prof Khalil Ahmed	External Member
3. Prof G L Reddy	External Member
4. Mr. Khaja Moinuddin	Member 
5. Dr. Afroz	Member 
6. Mr. Subhash Alha	Member 
7. Prof. Shabbir Ahmed	Special Invitee
8. Mr. Syed Waseem Raja	Special Invitee 

At the outset the Chairman welcomed all the members of the Board of Studies and explained briefly about the courses offered by the department and the agenda items were discussed at length and the committee resolved the following issues:

1. That, the issue of restructuring of the existing M.Sc (Mathematics) structure is discussed and it has been resolved to adapt the structure as given in ANNEXURE-1.
2. That, the syllabus of the newly introduced subjects, Integral Equations and Calculus of variations, Classical Mechanics is discussed intensively keeping the interests of the students going for UGC-CSIR Exam and finalised as given in ANNEXURE-2,3.
3. That, the possibility of merging the content of Real Analysis I and Real Analysis II is discussed and instead of two papers in Real Analysis one Paper of Real Analysis is proposed and the syllabus is prepared as mentioned in the ANNEXURE-4.
4. That, the revision of the syllabus of Topology is discussed and it is proposed to add metrization theorems and par-compactness in the fourth unit of the existing syllabus (ANNEXURE-5).
5. That, the structure of B.Sc.(General)/B.Sc(Honours) was discussed and it has been finalised to adapt the structure as mentioned in ANNEXURE -6.
6. That, the list of the paper setters and evaluators was updated as given in the ANNEXURE-7.

7. It was unanimously resolved that the Ph D (Mathematics) should commence from the academic year 2015-2016. It has also been decided to have three papers for Ph D course work. The syllabus of these papers is given in ANNEXURE-8, 9, 10. Further the syllabus as decided by the Board for the Ph D entrance examination is given in ANNEXURE-11.

Finally the meeting concluded at 1.00 p.m. with the thanks to all the members from the Chairman.

  
Chairman-BoS Mathematics