

**Shri Manibhai Virani & Smt. Navalben Virani Science College, Rajkot
(Autonomous)
Affiliated to Saurashtra University, Rajkot.**

BOARD OF STUDIES – MATHEMATICS

13th MEETING OF BOARD OF STUDIES in MATHEMATICS

Programme: B.Sc. Mathematics

Date: **22/05/2023**

Venue: **Hybrid Mode**

Time: **11:30am**

Mode of Meeting:	Hybrid – Online and Offline
Date:	22th May 2023
Time:	10:30am
Platform for online participation:	Google Meet
Venue and Link Details with ID Password etc.	13th MEETING OF BOARD OF STUDIES in MATHEMATICS, Monday, May 22 nd 2023 Time: 11.30 am onwards
Venue for off-line meeting	Venue: Library and Learning Center, Reference Room (Second Floor) Google Meet joining info Meeting link: https://meet.google.com/fsx-rybp-cfw

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AGENDA

1. Introductory remarks by Chairperson of the BoS.

- 1.1** Confirmation of MoM & ATR of previous BoS held on 12/11/2022.
- 1.2** Departmental activities and updates.

2. For B.Sc. Mathematics program – Batch 2021-22 to 2023-24 and Batch 2022-23 to 2024-25:

- 2.1** Scheme of Learning and Evaluation (SLE) for Sem.-5 & 6 of B.Sc. Mathematics program (with course title and related details).
- 2.2** Syllabi of all theory & practical courses including core elective and self-study courses of Sem.-5 & 6 of B.Sc. Mathematics program.
- 2.3** Syllabi and evaluation norms of Part-II - Trans Disciplinary Elective (TDE) course offered by the department.
- 2.4** Question paper pattern for all theory & practical courses of Sem.-5 & 6 of B.Sc. Mathematics program.
- 2.5** List of paper setters and examiners for all theory & practical courses of B.Sc. Mathematics program.

3. Curriculum credit framework FYUGP – For Students admitted from A.Y. 2023- 24 & onwards

- 3.1** Regulations for UG program – B.Sc. / B.Sc. (Honours) Mathematics program.
- 3.2** Scheme of Learning & Evaluation (SLE) for all semesters and with course title and related details for Sem.-1 of UG program – B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program (based on the recommendations for 4 year UG program under Curriculum and Credit Framework for Undergraduate Programs - guidelines / framework/ regulations of UGC, Gujarat Government and affiliating Saurashtra University in light of NEP-2020).
- 3.3** Syllabi of all theory & practical courses of Sem.-1 of B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program.
- 3.4** Syllabi for courses offered to other programs / departments in Sem.-1.

- 3.5 Syllabi for Value Added courses / Skill Enhancement courses offered by the department in Sem.-1
- 3.6 Question paper pattern for all theory & practical courses of Sem.-1 of B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program.
- 3.7 List of paper setters and examiners for all theory & practical courses of Sem.-1 of B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program.
- 3.8 Recommendations for implementation of credit equivalence / transfer for MOOCs including SWAYAM NPTEL platform / e-learning portals.

4. **Any other agenda:** Authorization to the BoS Chairperson for amendment / revision in BoS agenda in line / tune with latest revised guidelines / framework issued by UGC, Gujarat Government and Saurashtra University from time to time.

BoS Members:

S. No.	Name	Membership	Present / Absent
1.	Mr. Jignasu N. Chauhan	Head of the Department, Chairman	Present
2.	Mr. V. N. Vaghasia	Member Secretary	Present
3.	Dr. Samir K. Vaidya	Subject Expert, VC-Nominee	Leave of Absence
4.	Mr. M. L. Joshi	Faculty member	Leave of Absence
5.	Mrs. Nisha K. Nesadia	Faculty member	Present - Online
6.	Mrs. Miral P. Ambavi	Faculty member	Present
7.	Dr. Rakhimol V Issac	Subject Expert, AC nominee	Present - Online
8.	Mrs. Jayshri Joshi	Subject Expert, AC nominee	Present
9.	Mr. Jayesh R. Vaghela,	Member from Industry/ Corporate Sector/ Allied Area	Present
10.	Dr. Jeegnesh Bosamiya,	Member Alumnus	Present
11.	Dr. Parag D. Ajani	Co-opted member	Present - Online

Minutes of Meeting:

The Board of Studies in Mathematics met as indicated above and discussed on the aforementioned Agenda. Sharing the expertise of all the members and with very proactive inputs, the members unanimously resolved the following:

A. For B.Sc. Mathematics program – Batch 2021-22 to 2023-24 and Batch 2022-23 to 2024-25:

- 1. MoM of previous BoS held on 12/11/2022 was confirmed** by the esteemed members of the board.
- 2. Scheme of Learning and Evaluation (SLE) for 5th & 6th Semester of B.Sc. Mathematics program (with course title and related details) was discussed & framed.**
Enclosure–BMTI
- 3. Syllabi of all theory & practical courses including core elective and self-study courses of Sem.-5 & 6 of B.Sc. Mathematics program were discussed & framed.**
Enclosure –BMTII

3.1 New Courses introduced:

3.2 Courses Removed

3.3 Courses Modified as per following table.

Sem	Courses components removed from the previous scheme	New Courses / components introduced in the proposed scheme
V	Core 12 : Programming in C	Core 11: Problem solving using programming
		Core Elective 2: Fuzzy Mathematics
	Core Practical 9 : Programming in C	Core Practical 5: Practical on Numerical Analysis and Problem solving using computer programming
	Core Practical 10 : Practical on Fundamentals of Numerical Analysis	
	Core Practical 11 : Advanced SCILAB	Core 13: Concept Recapitulation Test (CRT)
	Core 14: Computer Based Test	
		Core Enrichment 3: Internship /Training/
	Group Project /Internship / Training	Core Enrichment 4: Minor Project / Dissertation/ Review Article Writing/ Industrial Visit Report (Continue to Semester VI)
	-	FS IV: Community Engagement
Generic Elective-I	TDE 2:	

Sem	Courses components removed from the previous scheme	New Courses / components introduced in the proposed scheme
VI	Core 15 : Ring Theory	-
	DSE-Core 2: Graph Theory / Basics of Number Theory/	-
	Core Practical 12: Practical on Optimization.	Core Practical 6: Practical on Advanced Numerical Analysis and Optimization
	Core Practical 13: Practical on Advanced Topics in Numerical Analysis.	
	Core Practical 14: Introduction to SAGE.	Core 13:
Core 14: Computer Based Test		

		Concept Recapitulation Test (CRT)
	Generic Elective-II	-
	Project/ Internship/ Training	Core Enrichment 4: Minor Project / Dissertation/ Review Article Writing/ Industrial Visit Report (continue from Semester V)
OR		
VI	-	Core Enrichment 4: Minor Project / Dissertation/ Review Article Writing/ Industrial Visit Report
	Project/ Internship/ Training(2 Credits)	Core Enrichment 5: Project / Skill training / Start-up/ (14 Credits)
	Core 15 : Ring Theory	-
	Core 16: Optimization through Mathematical Programming.	-
	Core 17 : Advanced Topics in Numerical Analysis.	-
	DSE-Core 2: Graph Theory / Basics of Number Theory/	-
	Core Practical 12: Practical on Optimization.	-
	Core Practical 13: Practical on Advanced Topics in Numerical Analysis.	-
	Core Practical 14: Introduction to SAGE.	-
	Generic Elective-II	-

4. Syllabi and evaluation norms of Part-II - Trans Disciplinary Elective (TDE) course offered by the department were **discussed & framed.** **Enclosure BMTIII**
5. **Question paper pattern** for all theory & practical courses of Sem.-5 & 6 of B.Sc. Mathematics program were **discussed and finalized.** **Enclosure –BMTIV**
6. **List of paper setters and examiners** for all theory & practical courses of B.Sc. Mathematics program were **discussed and finalized** as indicated in.
Enclosure –BMTV

The above will be effective for students admitted in **AY 2021-22 & 2022-23**

B. Curriculum credit framework FYUGP – For Students admitted from A.Y. 2023-24 & onwards

7. **Regulations** for UG program – B.Sc. / B.Sc. (Honours) Mathematics program were **discussed & framed.** **Enclosure-BMTVI**

8. **Scheme of Learning & Evaluation (SLE)** for all semesters and with course title and related details for Sem.-1 of UG program – B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program (based on the recommendations for 4 year UG program under Curriculum and Credit Framework for Undergraduate Programs - guidelines / framework/ regulations of UGC, Gujarat Government and affiliating Saurashtra University in light of NEP-2020) **were discussed & framed.** **Enclosure - BMTVII**
9. **Syllabi of all theory & practical courses** of Sem.-1 of B.Sc. / B.Sc. (Honours)/ B.Sc. (Honours with Research) Mathematics program were **discussed & framed.** **Enclosure –BMTVIII**
10. **Syllabi for courses offered to other programs / departments** in Sem.-1 was **discussed & framed** as follows.
 a. Multidisciplinary course for the common basket: **“Introduction to Statistics”** was **discussed and framed.** **Enclosure –BMT IX**
11. **Syllabi for Value Added courses / Skill Enhancement** courses offered by the department in Sem.-1 were **discussed & framed.**
 a. **SEC** of the Department: Introduction to Mathematical Software. **Enclosure –BMTX**
12. **Question paper pattern** for all theory & practical courses of Sem.-1 of B.Sc. / B.Sc. (Honours)/ B.Sc. (Honours with Research) Mathematics program were **discussed and finalized.** **Enclosure –BMTXI**
13. **List of paper setters and examiners** for all theory & practical courses of Sem.-1 of B.Sc. / B.Sc. (Honours) / B.Sc. (Honours with Research) Mathematics program were **discussed and finalized** as indicated in. **Enclosure –BMTXII**
14. **Ref:** Credit Transfer from Swayam-NPTEL: Recommendations for universities to implement credit transfer from Swayam NPTEL MOOCs date of creation 10th July, 2019.
 As per the presentation & deliberation made in session-1: General meeting of all BoS followed by discussion in subject specific BoS on 22nd May 2023; following resolutions related to credit transfer from MOOCs were made:
- 1) For Part-II discipline specific core MOOCs Swayam-NPTEL e-learning portal be considered.
 - 2) For Part-I & III courses coursera, edX, Khan Academy etc., e-learning platforms be considered in addition to NPTEL.
 - 3) Following options from the above guideline be considered:
 Option 1: Domain Certifications, Option 3: Cultivating the habit of self-study – General/Open Elective Category & Option 4: Partial Credits
 - 4) Recommendations for NPTEL MOOCs for students admitted from 2023-24 & onwards, will be presented in ensuing BoS for the resolution & approval.
15. **The members of BoS unanimously agreed to give authorization to the BoS Chairperson** for amendment / revision in BoS agenda in line / tune with latest revised guidelines / framework issued by UGC, Gujarat Government and Saurashtra University from time to time.

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Platform: Offline

BoS Members: -

S. No.	Name	Membership	Signature / Absent
1.	Mr. Jignasu N. Chauhan	Head of the Department, Chairman	
2.	Mr. V. N. Vaghasia	Member Secretary	
3.	Dr. Samir K. Vaidya	Subject Expert, VC-Nominee	
4.	Mr. M. L. Joshi	Faculty member	
5.	Mrs. Nisha K. Nesadia	Faculty member	
6.	Mrs. Miral P. Ambavi	Faculty member	
7.	Dr. Rakhimol V Issac	Subject Expert, AC nominee	
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9.	Mr. Jayesh R. Vaghela,	Member from Industry/ Corporate Sector/ Allied Area	
10.	Dr. Jeegnesh Bosamiya,	Member Alumnus	
11.	Dr. Parag D. Ajani	Co-opted member	