

DEPARTMENT OF MATHEMATICS
SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Meeting Held on Nov 13th 2015 at Dept. of Mathematics

Members Present

1. Dr. M. N. Nampoothiri (Chairman)
2. Dr. A. Vijayakumar
3. Dr. Paul Isaac
4. Prof. W. T. Paul (Convener)
5. Mr. Saji Mathew
6. Prof. Jose P. Joseph
7. Prof. M. P. Sebastian
8. Dr. Jeenu Kurian
9. Prof. Jeet Kurian Mattam
10. Prof. Didimos K. V.
11. Prof. Sanil Jose
12. Prof. Jinesh P. Joseph

Minutes of BoS Meeting held on 13/11/2015

Meeting began with a silent prayer followed by welcoming all the members and the invited members by the convener Prof. W. T. Paul. Discussions were done under the chairmanship of Dr. M. N. Nampoothiri. Dr. Vijayakumar and Dr. Paul Isaac were present.

- **Approved the Revised Syllabus for M.Sc Mathematics Programme with effect from 2016 admission.**

(Major changes in the Revised Syllabus: In the fourth Semester there are eight elective courses including the project. A candidate can select any five including Differential Geometry and Multivariable Calculus, also there will be viva voce at the end of second and fourth semester.)

The above changes are subject to the approval of the Academic Council, otherwise the existing pattern shall be continued.

- Revised the Question paper pattern for P. G. Programme.

(Each Question Paper will be having three parts, Part A contains 10 compulsory questions having 1.5 marks each, In Part B, Candidate should answer 4 out of 6 questions, 5marks each. There is no change in the existing pattern in part C.)

- Reviewed the last year autonomy question paper and panel of question paper setters for both PG and UG. Meeting suggested that at least 20% of the question paper should contain problems /applied level questions equally distributed throughout the question paper, for both internal and external examinations for PG programmes.
- One week bridge course can be conducted in the beginning of the PG Programme.
- Logic and Critical Thinking shall be introduced as a new value-added course.

Meeting came to a close at 12.45 with lunch.


Chairman

(Board of Studies)


Dr. Johnson X Palackapp.....
Principal
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DEPARTMENT OF MATHEMATICS
SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Meeting Held on 22nd July 2017

Members Present


1. Dr. M. N. Nampoothiri (Chairman)
2. Dr. Paul Isaac
3. Prof. M. P. Sebastian
4. Asst. Prof. Jeet Kurian Mattam
5. Asst. Prof. Didimos K. V.
6. Prof. Sanil Jose

The BoS in Mathematics met on 22/07/2017 at 11.00 A. M. in the Department. Dr. M.N. Namboodiri, Chairman, presided over the meeting. The main agenda was to discuss the question paper pattern and question bank system. The meeting decided to continue with the present question paper pattern. The question bank system was evaluated as successful, even though the software for the same left a lot to be desired. The chairman suggested that the department should have the freedom, at the scrutiny stage of a question paper, to make changes in the question paper without effecting a change in the essence of the question paper. For example, the Department should be able to change the integrand of an integration problem. This is to avoid predictability of the question paper.

The meeting also discussed the review of the existing syllabus for the 2018-2019 batch onwards. It was decided to make a comparative study of the current syllabus and the new M.G University syllabus so as to form the basic frame work. A panel of 2 teachers shall be assigned for the revision of each paper. The meeting discussed about the possibility of starting

new value-added courses and resolved to introduce Pre-calculus techniques as the new course.

The meeting came to an end by 12.30 P. M.



Head of Department

Department of Mathematics.



Dr. Johnson X Palackappan
Principal
Sacred Heart College
Thevara, Kollam

DEPARTMENT OF MATHEMATICS
SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Minutes of the Board of Studies Meeting held on 18th July 2018

Members Present

1. Dr. M. N. Nampoothiri
2. Dr. A. Vijaya Kumar
3. Prof. M. P. Sebastian
4. Dr. Jeenu Kurian
5. Prof. Jeet Kurian Mattam
6. Prof. Sanil Jose
7. Prof. Didimos K. V.

The BoS of Mathematics was held on 18/07/2018, Wednesday in the Department of Mathematics, Sacred Heart College, Thevara. The meeting began at 4.00 P.M. The meeting approved the following:

- Revision of the Syllabus of selected Core Courses of B.Sc Mathematics Programme.
- Revision of the Syllabus of Complementary Courses in Mathematics.
- Revision of the Question Paper pattern.
- Revision of the Syllabus of selected Core Courses in Mathematics of the B.Sc (Computer Applications Programme)
- Revision of the Mathematics Core Course for B.C.A. Courses.
- New value-added course Basic Aptitude Techniques in Mathematics.

The modifications in the syllabus are summarised in the following table

Changes in the Syllabus for B.Sc Mathematics

CORE COURSES

Sl. No.	Semester	Code	No. of Credits	Course Title		Remarks (Changed/Not Changed)
				Present Syllabus	Revised Syllabus	
1	1	19UCRMAT1	3	Foundation of Mathematics	Calculus	Changed
2	2	19UCRMAT2	3	Analytic Geometry, Trigonometry and Matrices	Advanced Calculus and Trigonometry	Changed
3	3	19UCRMAT3	4	Calculus	Vector Calculus, Theory of Equations and Matrices	Changed
4	4	19UCRMAT4	4	Vector Calculus, Theory of Equations and Numerical Methods	Analytic Geometry, Numerical Methods and Number Theory	Changed
5	5	19UCRMAT5	5	Mathematical Analysis	Real Analysis -1	Changed
6	5	19UCRMAT6	5	Differential Equations	Differential Equations	Not Changed
7	5	19UCRMAT7	5	Abstract Algebra	Algebra	Changed

8	5	19UCRMAT8	5	Fuzzy Mathematics	Human Rights and Mathematics for environmental studies	Changed
9	5	19UCRMAT1	3	Open Course	Open Course	Not Changed
10	6	19UCRMAT9	4	Real Analysis	Real Analysis -2	Changed
11	6	19UCRMAT10	4	Complex Analysis	Complex Analysis	Not Changed
12	6	19UCRMAT11	4	Discrete Mathematics	Graph Theory and Linear Algebra	Changed
13	6	19UCRMAT12	4	Linear Algebra and Metric Spaces	Fourier Series, Laplace Transforms and Metric Spaces	Changed
14	6	19UCRMAT13	3	Choice Based Course	Choice Based Course (The syllabus of the course Operations Research has been revised)	Changed
15	6	19UCRMATP5	2	Project		

Complementary Courses

Sl. No.	Semester	Course Code	No. of Credits	Name of Course	Remarks (Changed/Not Changed)
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				Existing Syllabus	Revised Syllabus	
1	1	19UCPMAT1	3	Differential Calculus and Trigonometry	Calculus -I	Changed
2	2	19UCPMAT2	3	Integral Calculus and Matrices	Calculus –II and Numerical Analysis	Changed
3	3	19UCPMAT3	4	Vector Calculus, Differential Equations and Analytic Geometry	Differential Equations, Matrices and Trigonometry	Changed
4	4	19UCPMAT4	4	Fourier Series, Differential Equations, Numerical Analysis and Abstract Algebra	Fourier Series, Laplace Transforms, Fourier Transforms and groups	Changed

Changes for B.Sc Computer Applications

Sl. No.	Semester	Course Code	No. of Credits	Course Title		Remarks (Changed/Not Changed)
				Present Syllabus	Revised Syllabus	
1	1	19UCRCMT 1	3	Foundation of Mathematics	Foundation of Mathematics	Not Changed

2	2	19UCRCMT 2	3	Analytic Geometry, Trigonometry and Matrices	Calculus	Changed
3	3	19UCRCMT 3	4	Calculus	Vector Calculus, Trigonometry and Matrices	Changed
4	4	19UCRCMT 4	4	Vector Calculus, Theory of Equations and Numerical Methods	Analytic Geometry, Numerical Methods and Theory of Equations	Changed
5	5	19UCRCMT 5	4	Mathematical Analysis	Real Analysis –I	Changed
6	5	19UCRCMT 6	4	Differential Equations	Human Rights and Mathematics for environmental studies	Changed
7	5	19UCRCMT 7	4	Real Analysis	Graph Theory and Numerical Analysis	Changed

The following new core courses were introduced:

- 1) Calculus
- 2) Advanced Calculus
- 3) Human Rights and Mathematics for Environmental Studies
- 4) Basic Python Programming and Typesetting in LaTeX

5) Numerical Analysis

The following new complementary courses were introduced:

- 1) Calculus – 1
- 2) Calculus -2 and Numerical Analysis.

The following core courses have been thoroughly revised and major changes have been made:

- 1) Vector Calculus, Theory of Equations and Matrices
- 2) Analytic Geometry, Numerical Methods and Number Theory
- 3) Real Analysis - 1
- 4) Algebra
- 5) Real Analysis - 2
- 6) Linear Algebra and Graph Theory

The following complementary courses have been thoroughly revised and substantial changes have been made:

- 1) Fourier Series, Laplace Transform and Metric Spaces.
- 2) Differential Equations, Matrices and Trigonometry.
- 3) Fourier Series, Laplace Transform, Fourier Transform and Groups.

Changes for BCA

One Module in the second semester is to be replaced with Numerical Analysis or Number Theory.

B: Changes in the question paper pattern

Revised Pattern


	Part A (2 Marks Questions)	Part B (5 Marks Questions)	Part C (10 Marks Questions)
No. of questions to be answered	10	5	3
Total Number of questions	12	8	4
Total Marks in each Section	20	25	30
Total Marks for each course in End Semester Evaluation: 75			
Total Marks for each course in Continuous Internal Assessment: 25			

- Dr. M.N Nampoothiri suggested a reference book for Ordinary Differential Equations authored by Nanda Kumar and Raju.
- Dr. A. Vijayakumar suggested that the course 'Abstract Algebra' be renamed as 'Algebra'.
- Dr. A. Vijayakumar suggested that a book on History of Indian Mathematics by P. P. Divakaran be included as a reference text. He also suggested that the name of the publisher and year of publication be included for all references in the syllabus. He suggested *Graph Theory* by Narsingh Deo as a reference text for Graph Theory.
- The Board suggested that two papers, namely 1) Linear Algebra and Metric Spaces 2) Fourier Series, Laplace Transform and Graph Theory, in the sixth semester be modified as follows. 1) Graph Theory and Linear Algebra 2) Fourier Series, Laplace Transform and Metric Spaces.
- Changes in the question paper pattern were approved with the modification that the number of questions to be answered in section C to be out of 4.

The meeting came to an end at 5.00 P.M.

Submitted to the Academic Council for Approval and Ratification.


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Head of Department
Department of Mathematics

DEPARTMENT OF MATHEMATICS
SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Minutes of the BoS meeting held on 15/03/2019

The meeting began at 11.15 A.M. in the department. The following members were present.

- 1) Prof. M. P. Sebastian, Associate Professor and HOD
- 2) Prof. Arun K. K., ISCER, TVM.
- 3) Sri. Saji Mathew C. A.
- 4) Dr. Jeenu Kurian, Asst. Professor
- 5) Mr. Jeet Kurian Mattom, Asst. Professor
- 6) Dr. Didimos K. V. Asst Professor
- 7) Mr. Sanil Jose, Asst. Professor

The BoS in Mathematics met on 15th March, 2019 in the Department at 11.30 am and has taken the following decisions.

1. **The BoS in Mathematics decided to implement the revised syllabus of MSc. Mathematics programme from 2020-2022 batch onwards.** Board of Studies discussed a draft of the new syllabus by comparing it with the existing University syllabus. The new syllabus will be ready for submission to the University before December 2019.
2. The BoS proposed to make changes in the revised syllabus (approved by University) of BCA Semester 2 having course code 19U2CPCMT2 and course title Discrete Mathematics.
 - a. In the revised syllabus, the course code is wrongly given as 19U1CRCMT2 and it is changed to 19U2CPCMT2.
 - b. In the revised syllabus, the course credit is wrongly given as 3 and it is changed to 4.
 - c. The 2nd and 4th modules are retained and 1st and 3rd modules are replaced by Solution of equations and Numerical solutions for Calculus.

3. Incorporated issues like gender equality, environment and sustainability, human values and professional ethics in the syllabus.
4. The Board of Studies suggested the following course distribution for the PG Programme.

First Semester	Linear Algebra
	Abstract Algebra
	Real Analysis
	Optimization Techniques
	Number Theory
Second Semester	Basic Topology
	Measure Theory and Integration
	Ordinary Differential Equations
	Graph Theory
	Complex Analysis
Third Semester	Advanced Topology
	Advanced Complex Analysis
	Functional Analysis
	Partial Differential Equations
	Multivariate Calculus
Fourth Semester	Advanced Functional Analysis
	Differential Geometry
	Probability Theory
	Numerical Analysis
	Theory of Wavelets
	Coding Theory & Cryptography
	Algebraic Topology
	Commutative Algebra
	Harmonic Analysis
	Complex Dynamics
	Fractals

Book Suggestions:

1. Probability Theory and Examples, Cambridge University, Durrett
2. Functional Analysis, Balmohan V Limaye
3. Topology, James R Munkres

It was suggested to introduce an Add on Course on Latex Typesetting and Python Programming.

40% of internal marks for project evaluation should be allotted in the third semester itself.



Head of Department

Department of Mathematics



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