

Central University of Himachal Pradesh

(ESTABLISHED UNDER CENTRAL UNIVERSITIES ACT 2009)
Dharamshala, Himachal Pradesh-176215



NAAC Criterion-I

Key Indicator – 1.4.2 Action Taken Report on the Feedback 1.4.2 Evidences



Srinivasa Ramanujan Department of Mathematics
Central University of Himachal Pradesh, Dharamshala,
Kangra



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Dharamshala, Himachal Pradesh-176215



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Srinivasa Ramanujan Department of Mathematics

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| | Feedback | |

Central University of Himachal Pradesh

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TAB-Shahpur, Shahpur, Distt. Kangra (HP) - 176206
Website: www.cuhimachal.ac.in

File No. 1974/1-3/CUHP 12/

Dated: 26.05.2016

Faculty meeting to take the action on the basis of Student/Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 26.05.2016. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department, and the others if any. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- As per the suggestions of the teachers, it was decided to conduct the orientation programme in the beginning of every semester to acquaint them with the overall course of action in the particular semester.
- 2. As per the suggestion of the Alumni/Teachers, it was decided to offer the following courses on differential equations in M.Sc. Mathematics in Monsoon Semester 2016:

| Sr. No. | Name of the Course | Course Code | Credits | Course Type | Name of the Teacher |
|---------|--|----------------|---------|-------------|--|
| 1. | Ordinary and Partial Differential Equations | IAM 402 | 04 | Compulsory | Dr. R. Singh, Dr. R. Kumar, Dr. S.K. Srivastava |
| 2. | Partial Differential Equations | MTH 402 | 04 | Optional | Dr. R. Kumar |

3. As per suggestion of the students, all teachers agreed to prepare the time table for tutorial and remedial classes also.

| Sr. No. | Name of the Faculty Member | Designation | Signature | |
|---------|----------------------------|---------------------|-----------|--|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | Schin | |
| 2. | Dr Rakesh Kumar | Assistant Professor | | |

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File No. MTH 1-3 2441 12

Dated: 23.01.2017

Faculty meeting to take the action on the basis of Student/Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 23.01.2017. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department, the others if any. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- As per the suggestions of the teachers, it was decided to conduct the orientation programme in the beginning of every semester to acquaint them with the overall course of action in the particular semester.
- 2. As per the suggestion of the Alumni and Teachers, it was decided to offer the following courses on Algebra, Mathematical Methods and Fluid Dynamics in M.Sc. Mathematics in Spring Semester 2017:

| Sr. No. | Name of the Course | Course Code | Credits | Course Type | Name of the Teacher |
|---------|----------------------|----------------|---------|-------------|------------------------|
| 1. | Algebraic Curves | MTH 615 | 04 | Optional | Dr. R. Singh, |
| 2. | Mathematical Methods | IAM 404 | 04 | Optional | Dr. S.K. Srivastava |
| | Fluid Dynamics | IAM 405 | 04 | Optional | Dr. R. Kumar |

3. As per suggestion of the students, students were allowed to organize farewell party to the outgoing students.

| Sr. No. | Name of the Faculty Member | Designation | Signature |
|---------|----------------------------|---------------------|-----------|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | Selin |
| 2. | Dr Rakesh Kumar | Assistant Professor | |

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File No. 1714/1-3/2441/12

Dated: 27/06/2017

Faculty meeting to take the action on the basis of Student/Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 27/06/2017. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- 1. As per the suggestions of the teachers, it was decided to take weekly class tests of the students, and organize quiz competitions on general mathematics.
- 2. As per the suggestion of the Alumni and Teachers, it was decided to offer the following course in M.Sc. Mathematics:

| Name of the Course | Course Code | Credits | Course Type | Name of the Teacher |
|-----------------------------------|-------------------------|---------------------------------|------------------------------------|---|
| Field Theory and Galois Theory | MTH 520 | 04 | Optional Course | Guest Faculty |
| | Field Theory and Galois | Field Theory and Galois MTH 520 | Field Theory and Galois MTH 520 04 | Field Theory and Galois MTH 520 04 Optional |

3. As per suggestion of the students, all teachers agreed to include only the half of the syllabus in Mid-Term examinations.

| Sr. No. | No. Name of the Faculty Member Designation | | Signature | |
|---------|--|---------------------|-----------|--|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | Selin | |
| 2. | Dr Rakesh Kumar | Assistant Professor | M/ | |

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File No. 174/ 1-3 | CUHP 1/2

Dated: 20.12.2017

Faculty meeting to take the action on the basis of Student/Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 20.12.2017. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- 1. As per the suggestions of the teachers, it was decided to discuss the questions in the class which are asked in the Mid-Term Examinations.
- 2. As per the suggestion of the Alumni and Teachers, it was decided to offer the following course on Algebra in M.Sc. Mathematics in **Spring Semester 2018**:

| lits Name of the Teacher |
|--|
| lits Name of the Teacher Guest Faculty |
| Dr. R. Singh |
| |

3. As per suggestion of the students, all teachers agreed to allow the students to organize the Farewell Party to the students.

| | Designation | Signature |
|----------------------------|----------------------------|-----------|
| Dr Sachin Kumar Srivastava | 0 | |
| Dr Rakesh Kumar | | Edia |
| | Dr Sachin Kumar Srivastava | |

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File No. 1174 1-3 | CUMP 12-

Dated: 29.06.2018

Faculty meeting on Action Taken Report on the basis of Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 29.06.2018. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- As per the suggestions of the teachers, all teachers agreed to involve the PhD scholars of the Department in coaching of the students for NET/GATE examinations.
- As per the suggestion of the Alumni and Teachers, it was decided to offer the following course in M.Sc. Mathematics:

| Name of the Course | Course Code | Credits | Course Type | Name of the Teacher |
|----------------------------------|---------------------------|---|---|---|
| M | I.Sc. Mathemat | tics Semeste | er –III | |
| Lebesgue Measure and Integration | MTH 405 | 04 | Optional Course | Dr. S.K. Srivastava |
| | M Lebesgue Measure and | Code M.Sc. Mathema Lebesgue Measure and MTH 405 | Code M.Sc. Mathematics Semester Lebesgue Measure and MTH 405 04 | Code M.Sc. Mathematics Semester –III Lebesgue Measure and MTH 405 04 Optional |

3. As per suggestion of the students, it was decided to utilize the PPTs in the classrooms teachings along with the blackboard writing.

| Sr. No. | Name of the Faculty Member | Designation | Signature |
|---------|----------------------------|---------------------|-----------|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | Lelin |
| 2. | Dr Rakesh Kumar | Assistant Professor | |

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File No. MTH /1-3/2449/12

Dated:13/12/2018

Faculty meeting to take action on the basis of Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 13/12/2018. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- 1. As per the suggestions of the teachers, all teachers agreed to guide the students in the preparation of NET/GATE and other examinations.
- As per the suggestion of the Alumni and Teachers, it was decided to offer the following Skill Development Course in Vedic Mathematics in Spring Semester 2019:

| Sr. No. | Name of the Course | Course Code | Credits | Name of the Teacher |
|---------|--------------------|-------------|---------|---------------------|
| 1. | Vedic Mathematics | IAM 412 | 02 | Guest Faculty |
| | | | | |

3. As per suggestion of the students, it was decided to organize Workshops/Seminars on current trends in Mathematics, and update the students with the job areas on Mathematical Fields.

| Sr. No. | Name of the Faculty Member | Designation | Signature |
|---------|----------------------------|---------------------|-----------|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | telin |
| 2. | Dr Rakesh Kumar | Assistant Professor | OV2 |

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File No. MTH/1-3/ LUMP/ 2

Dated: 15.06.2019

Faculty meeting for Action Taken Report on the basis of Alumni/Teacher/Parent Feedback

The all faculty member meeting of the Department of Mathematics was conducted on 15.06.2019. The aim of the meeting was to discuss the Suggestions received from Student/Alumni/Teacher/Parent regarding curricular/co-curricular activities of the Department. The following actions were taken on the suggestions from Student/Alumni/Teacher/Parent:

- As per the suggestions of the teachers, all teachers agreed to prepare the list of books on Indian Mathematics for recommendation to the Library.
- 2. As per the suggestion of the teachers, following Clubs/Societies in Mathematics were suggested, and were accepted with the following activities:

| Sr. No. Name of Club/Society | | Type of Activities | | |
|------------------------------|-----------------------------------|---|--|--|
| 1. | Aryabhatta Math Club | To conduct invited talks, celebrating National Days of Importance, organising cultural programmes, picnics and educational tours, and other Extra-curricular activities | | |
| 2. | Himalayan Mathematical Society | To conduct Seminars, Conferences and Workshops by providing the suitable platform to the researchers, scientists as well as the students of the Department to acquaint them with the latest trends in Mathematics and related fields | | |

- As per the suggestion of the Alumni, it was decided to conduct a Workshop on Ancient Indian Mathematics and Vedic Mathematics. It was also decided to offer a skill development course on Vedic Mathematics to the students.
- 4. As per suggestion of the students, it was decided to conduct the extra classes of the students on Saturday and Sunday as well.

| Sr. No. | Name of the Faculty Member | Designation | Signature |
|---------|----------------------------|---------------------|-----------|
| 1. | Dr Sachin Kumar Srivastava | Assistant Professor | Schin |
| 2. | Dr Rakesh Kumar | Assistant Professor | - (W) |

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File No. MTH 1-3 (447 12

Dated:13/12/2019

Faculty meeting on Action Taken Report on the basis of Alumni/Teacher/Parent Feedback

The meeting of the Faculty Members of the Department of Mathematics was conducted on 13/12/2019. The meeting was aimed to discuss the introduction/ revision of courses for the Spring Semester 2020. In this meeting Suggestions received from Alumni/Teacher/Parent regarding curriculum updation were discussed, and it was decided to offer the following courses:

M.Sc. Mathematics Semester -I

| Sr. No. | rame of the Course | M.Sc. Mathem Course Code | Credits | | Name of the |
|---------|---|--------------------------------|-------------|----------------------|---------------|
| | Introduction to Mathematical Statistics | MTH 527 | 02 | Skill Development | Guest Faculty |
| | M | Sc. Mathemat | ics Semesta | Development | |
| | Operational Research | MTH 502 | 04 | Optional Course | Guest Faculty |

As per the suggestion of the students/Alumni, it was also decide that extra tutorial classes is to be conducted with the help of Research scholars to provide a practice hand to the students. Dr Sachin Srivastava agreed to prepare the list of new books for recommendation to the Library.

The following Faculty Members attended the meeting:

| r. No. | Name of the Faculty Member | Designation | G. |
|--------|----------------------------|---------------------|-----------|
| | Dr Sachin Kumar Srivastava | Assistant Professor | Signature |
| 2. | Dr Rakesh Kumar | Professor | Adin |

Department of Mathematics विभागाध्यक्ष, गणित विभाग Head, Department of Mathematics हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय Central University of Himachal Pradesh

अरथायी शैक्षणिक खण्ड/Temporary Academic Block शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176206

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File No. MTH 1-3/LUHP 112

Dated: 31.07.2020

Action Taken Report on the basis of StudentAlumni/Teacher/Parent Feedback

A meeting of the Faculty Members of the Srinivasa Ramanujan Department of Mathematics was conducted on 31.07.2020 to discuss the suggestions of Alumni/Teacher/Parent, to take actions on the suggestions and implement them Monsoon Semester 2020. The following decisions were in the meeting:

Following two courses is to be taught in Monsoon Semester 2020:

| | Name of the Course | Course | Credits | Course Type | Name of the Teacher |
|-----------|--------------------------|---------|---------|----------------------|------------------------|
| 1.5C. IV. | lathematics Semester –I | | | | Teacher |
| | Vedic Mathematics | IAM 412 | 02 | Skill | Dr. Pankaj Kuma |
| | Elementary Number Theory | IAM 415 | 02 | Development Skill | |
| | Theory | | | Development | Guest Faculty |

- 2. As per the suggestions of Alumni and Teachers, it was decided to organize a Webinar on Srinivasa Ramanujan the famous Indian Mathematician. 3.
- As per the suggestions of students, it was decided to train the students for various competitive examinations especially CSIR NET, GATE Exams. All teachers agreed to take online classes of interested students for such classes. 4.
- The concerns of students regarding COVID 19 were also taken up, and it was decided create / update the Whatsaap group for the betterment of the teaching learning process. 5.
- It was decided to prepare the draft of the revised course structure of M.Sc. Mathematics as New Choice based Credit System.

The following Faculty Members attended the meeting:

| Sr. No. | Name of the Faculty Member | Designation |
|---------|----------------------------|---------------------|
| 2 | Dr. Pankaj Kumar | Assistant Professor |
| 3 | Dr Sachin Kumar Srivastava | Assistant Professor |
| 3. | Dr Rakesh Kumar | Professor |

Srinivasa Ramanujan Department of Mathematics विभागाध्यक्ष, श्रीनिवासा रामानुजन गणित विभाग

Head Snnwasa Ramanujan Department of Mathematics हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय

Central University of Himachal Pradesh अस्थायी शैक्षणिक खण्ड/Temporary Academic Block मान्य है। (हे०प्रव)

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File No. MTH /1-3 / (447) 12

Dated: 11.02.2021

Action Taken Report on the basis of StudentAlumni/Teacher/Parent Feedback

A meeting of the Faculty Members of the Srinivasa Ramanujan Department of Mathematics was conducted on 11.02.2021 to discuss the suggestions of Alumni/Teacher/Parent, to take actions on the suggestions and implement them **Spring Semester 2021**. The following decisions were in the meeting:

- As per the suggestions of the teachers, the following skill development course was decided to be offered in Spring Semester 2021 to enhance the mathematical thinking in the students:
 Course Name: Introduction to rigorous and Precise Thinking, Course Code: MTH 528, Credit:
- 2. As per the suggestions of the students, all teachers agreed to provide the additional study material to the students in print and media format to clear their basic concepts.
- 3. As per the suggestions of Alumni, the invited talk/lecture was decided to be conducted at regular intervals to update the course contents in view of NEP 2020.
- 4. As per the suggestions of parents, the matter of infrastructure is decided to be discussed with the higher authority. In view of their concern on COVID 19, all teachers agreed to take care of the emotional trauma of the students through counselling with them.
 - 5. As per the suggestion of the teachers, the following Club in Mathematics was suggested, and was accepted with the following activities:

| Sr. No. | Name of Club/Society | Type of Activities | | |
|---------|-----------------------------------|---|--|--|
| 1. | Self-reliant India with Math Club | To search and spread the mathematical knowledge among community and researchers for making India Self-reliant | | |

The following Faculty Members attended the meeting:

| Sr. No. | Name of the Faculty Member | Designation |
|---------|----------------------------|--------------------------------|
| 1. | Dr. Meenakshi | Assistant Professor House |
| 2. | Mr. Pankaj Kumar | Assistant Professor |
| 3. | Dr. Pankaj Kumar | Assistant Professor |
| 4. | Dr Sachin Kumar Srivastava | 1 |
| 5. | Dr Rakesh Kumar | Assistant Professor Professor |

HoD

Srinivasa Ramanujan Department Mathematics विश्वा

Head Snnivasa Ramanujan Department of Mathematics हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय Central University of Himachal Pradesh

अस्यायी श्रैक्षणिक खण्ड/Temporary Academic Block शाहपुर, काँगड़ा (हिञ्ज्रा)/Shahpur, Kangra (H.P.)-176208

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File No. MTH/1-10/Meeting/curs/21

Dated:08.08.2021

Action Taken Report on the basis of StudentAlumni/Teacher/Parent Feedback

A meeting of the Faculty Members of the Department of Mathematics was conducted on 08.08.2021to discuss the suggestions of Alumni/Teacher/Parent, to take actions on suggestions and to implement them Monsoon Semester 2021. The following decisions were taken in the meeting:

1. As per the suggestions of Teachers, all teachers agreed to teach the following courses in "Certificate in Vedic Mathematics" in Monsoon Semester 2021:

| Sr. No. | Name of the Course | Course Code | Credits | Name of the Teacher |
|---------|--|-------------|---------|---|
| 1. | Ancient Indian Mathematicians: Introduction and Contributions | CVMS 201 | 04 | Prof. Rakesh Kumar |
| 2. | History of Mathematics-An International Perspective | CVMS 203 | 04 | Dr. S.K. Srivastava |
| 3. | Introduction to Ancient Mathematics | CVMS 204 | 04 | Dr. Pankaj Kumar S/o Sh. Krishan Singh |
| 4. | Computational Power of Vedic Sutras | CVMS 205 | 04 | Dr. Pankaj Kumar S/o Lt. Sh. Maniram |
| 5. | Ramanujan and his Notebooks | CVMS 283 | 02 | Dr. Meenakshi |

- As per the suggestions of Alumni/Teachers, it was decided to celebrate the National Mathematics Day on 22nd December, 2021 by organizing quiz completion, mathematical rangoli, dumb sheraz, etc.
- 3. As per the demand of the students, it was decided to continue online classes for various competitive examinations especially CSIR NET, GATE Exams. It was also decided to inform the students though the whatsapp group along with the information on the Notice Board.
- 4. As per the suggestions of the teachers, it was decided to prepare the draft of the course contents and courses as per NEP-2020 guidelines issued by the University from time to time.

following Faculty Members attended the meeting:

| Sr. No. | Name of the Faculty Member | Designation |
|---------|---|---------------------|
| 1. | Dr. Meenakshi | Assistant Professor |
| 2. | Dr. Pankaj Kumar S/o Sh. Krishan Singh | Assistant Professor |
| 3. | Dr. Pankaj Kumar S/o Lt. Sh. Maniram | Assistant Professor |
| 4. | Dr. Sachin Kumar Srivastava | Assistant Professor |
| 5. | Prof. Rakesh Kumar | Professor (|

Head,

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File No. MTH/1-10/Meeting/CUMB/2)

Dated: Ol. Od. 2022

Action Taken Report on the basis of Student/Alumni/Teacher/Parent Feedback

A meeting of the Faculty Members of the Department of Mathematics was conducted on 01.02.2022 to discuss suggestions of Alumni/Teacher/Parent, to take actions on suggestions and implement them **Spring Semester 2022**. The following decisions were in the meeting:

1. As per the suggestions of Teachers, all teachers agreed to offer following University wide coursesin Spring Semester 2022:

| Sr. No. | Name of the Course | Course Code | Credits | Name of the Teacher |
|------------|--|-------------|---------|---|
| 1. | Probability Theory | MTH 413 | 02 | Dr. Pankaj Kumar S/o Lt. Sh. Maniram |
| 2. | Partial Differential Equation and Integral Equations | MTH 408 | 02 | Dr. Pankaj Kumar S/o Sh. Krishan Singh |

- 2. As per the suggestions of Alumni/Teachers, it was decided that the formation of different clubsto conduct outreach activities and awareness in Society will be initiated.
- 3. As per the demand of the students, it was decided to continue the online classes for various competitive examinations especially CSIR NET, GATE Exams in Spring Semester 2022 also.
- 4. As per the suggestions of the teachers, it was decided to prepare the draft of the course contents and coursesas per the NEP 2020 guidelines issued by University from time to time.

The following Faculty Members attended the meeting:

| Sr. No. | Name of the Faculty Member | Designation |
|------------|---|---------------------|
| 1. | Dr. Meenakshi | Assistant Professor |
| 2. | Dr. Pankaj Kumar S/o Sh. Krishan Singh | Assistant Professor |
| 3. | Dr. Pankaj Kumar S/o Lt. Sh. Maniram | Assistant Professor |
| 4. | Dr. Sachin Kumar Srivastava | Assistant Professor |
| 5. | Prof. Rakesh Kumar | Professor |

Head,

Srinivasa Ramanujan Department of Mathematics