## SHRI MATA VAISHNO DEVI UNIVERSITY SUB POST OFFICE - 182320, J \& K <br> Faculty of Sciences Department of Mathematics

## MINUTES OF THE SIXTH MEETING OF BOARD OF STUDIES OF DEPARTMENT OF MATHEMATICS, HELD ON $29{ }^{\text {TH }}$ APRIL 2016 IN ROOM NO. D 108

## PRESENT

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1. Prof. V.K. Bhat <br> Dean, Faculty of Sciences, DoM
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2. Prof. R. K. Sharma External Expert Member

IIT, Delhi
3. Prof. R. K. Mohanty
Dean, Faculty of Mathematics and Computer Sciences

South Asian University, New Delhi
4. Prof. D. S. Jamwal External Expert Member

HoD, Deptt. of Mathematics
University of Jammu
5. Dr. A. K. Das

HoD, Dept. of Mathematics, SMVDU
6. Dr. Jyoti Sharma
HoD, School of Business, SMVDU
7. Dr. Kuldip Raj

Assistant Professor
8. Dr. Ajay K. Sharma Member
Assistant Professor
9. Dr. Sandeep BhougalAssistant Professor
10. Dr. Surender SinghAssistant Professor
11. Dr. Sandeep Sharma
Assistant Professor
Dr. Rakesh Kumar, Assistant Prof., DoM could not attend the meeting

### 6.1 Welcome and Introduction

Vice-Chairman \& Head, Department of Mathematics introduced the members and subsequently the Chairman \& Dean, Faculty of Sciences welcomed all the members to the sixth meeting of Board of Studies. The Chairman thanked Prof. R. K. Mohanty, Prof R. K. Sharma \& Prof. D.S. Jamwal for visiting the University in spite of their busy schedule to attend the meeting.

### 6.2 Confirmation of the minutes of the $5^{\text {th }}$ BOS meeting

The Board confirmed the minutes of the $5^{\text {th }}$ meeting of the Board of Studies held on on $27^{\text {th }}$ May 2014.

### 6.3 Review of Academic Activities

Member Secretary, BOS gave a presentation about the academic activities of the school. A brief review is given here under:
(a) Admission:

## Details of Admission

| S.No. | Programme | Academic Session | No. of students <br> Admitted |
| :--- | :--- | :--- | :--- |
| 1 | M. Sc. Mathematics | $2014-2015$ | 30 |
| 1 | M. Sc. Mathematics | $2015-2016$ | 29 |
| 2 | Ph. D | $2014-2015$ | 02 |
| 2 | Ph. D | $2015-2016$ | 01 |

(b) Teaching:

Department of Mathematics offers courses in Applied Mathematics to different streams of B.Tech (Computer Science \& Engineering, Electronics \& Communication Engineering, Mechanical Engineering, \& Industrial Biotechnology), MCA and M.Tech programme. The Department also offers a two year full time M.Sc (Mathematics) Program. The courses in M. Sc.(Maths.) are interdisciplinary in nature. In addition to courses from pure Mathematics, the program includes courses from Theoretical Computer Science, Operational Research, Economics. Every $2^{\text {nd }}$ year student of M.Sc. (Mathematics) submits a report of a minor project under the supervision of a faculty member. This structure was appreciated by the Expert Members for its being interdisciplinary and application oriented.

Apart from teaching to B.Tech. \& M.Sc. students, the Department offers ten different papers for Ph.D. course work.

The Department has a library and computer lab. The library of the Department is supported by NBHM (National Board for Higher Mathematics). The Computer Lab. of the Department is used by M.Sc. students and research scholars.

## (c) Publications/Conferences/visits by Faculty members:

Apart from regular teaching all faculty members of the Department are actively involved in research work. Total number of research papers published in National \& International
foumals is more than 300 . Faculty members regularly attend conferences, seminars and workshops at National \& International level.
(d) Details of Doctoral research:

| Sl. <br> No | Name | Full Time/Part <br> Time | Status | Supervisor |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Nitu Bhat | Full Time | Awarded | Prof V.K. Bhat |
| 2 | Ambika Bhat | Full Time | Awarded | Dr. A.K. Sharma |
| 3 | Sunil Sharma | Full Time | Awarded | Dr. Kuldeep Raj |
| 4 | Ravi Raina | Part Time | Awarded | Prof V.K. Bhat |
| 5 | Pratibha Bhat | Full Time | Submitted | Dr. A.K. Das |
| 6 | Smarty Gosani | Full Time | Awarded | Prof V.K. Bhat |
| 7 | Kiran bala Chib | Full Time | Awarded | Prof V.K. Bhat |
| 8 | Sumeet Sharma | Full Time | Awarded | Dr. Rakesh Kumar |
| 9 | Meeru Abrol | Part Time | Submitted | Prof V.K. Bhat |
| 10 | Elina Subhadarsini | Full Time | Continuing | Dr. A.K. Sharma |
| 11 | Seema Jamwal | Full Time | Awarded | Dr. Kuldeep Raj |
| 12 | Ram Kishan | Full Time | Continuing | Dr. A.K. Sharma |
| 13 | Suruchi Pandoh | Full Time | Continuing | Dr. Kuldeep Raj |
| 14 | Ria Gupta | Full Time | Continuing | Dr. A.K. Das |
| 15 | Renu Anand | Part Time | Continuing | Dr. Kuldeep Raj |
| 16 | Charu | Full Time | Continuing | Dr. Kldeep Raj |
| 17 | Manisha Devi | Full Time | Continuing | Dr. Kuldeep Raj |
| 18 | Sapana Sharma | Full Time | Continuing | Dr. Rakesh Kumar |

(e) Research Projects / Grants:

At present the Department has four Research Projects. The details are as under:

1. PR-29 - Annual Grant for library from NBHM, DAE, Government of India (GO)
2. PR-40 (PI-Dr. Ajay Sharma) Composition Operators and Dynamics Valued functions. NBHM, DAE, Government of India.
3. PR-46 (PI- Dr. V. K. Bhat) 'Transparency of Skew Polynomial Rings over Noetherian Rings.' NBHM, DAE, Government of India.
4. PR-50 (PI- Dr. V. K. Bhat) 'Associated Prime ideals \& minimal Prime Ideals of Skew Polynomial Rings' UGC.
5. RP-87 (PI- Dr Rakesh Kumar) Major project "Transient Solutions of Markovian Queuing Models with Customer Impatience and Retention of Reneged Customers" UGC.
(f) Routine matters of the Department:
(i) Student Faculty Committee Meetings: To discuss the matters of students pertaining to teaching and problems (if any) regular SFC meetings are held. The committee includes faculty members and student representatives from the Department. Since the fifth BOS meeting, the matters concerning book
recommendation for Central library, School Library, course coverage, attendance and conduct of seminar etc were discussed in the SFC meetings held on $21^{\text {st }} \mathrm{Feb}$ 2015, $15^{\text {th }}$ April $2015,20^{\text {th }}$ August 2015, $11^{\text {th }}$ Jan 2016 and $22^{\text {nd }}$ April 2016.
(ii) Faculty meetings: To discuss the routine matters of the Department with respect to teaching, research, conduct of exams, procurement of books and journals, purchase of equipment, requisitions for furniture, submission of reports etc. regular faculty meetings are held during 2014-15 and 2015-16.

## (g) Other Activities:

(i) Organization of National Conference: Department of Mathematics organized a National conference in Recent Trends in Mathematical Sciences during 8-9 October 2015. More than 100 participants attended and presented their research papers. Prominent speakers of the conference are: Prof. A. H. Siddiqi, Prof. R. K. Mohanty, Prof. Rajneesh Kuma, Prof. S. Dharamraja and Prof. C. K. Jaggi.
(i) Student Seminar: The Department conducts a weekly Student Seminar attended by all M.Sc (Mathematics) students, Research Scholars \& Faculty members. In this seminar $1^{\text {st }}$ year and $2^{\text {nd }}$ year M.Sc.(Maths.) students speak on topics suggested by course coordinators. The topics are application oriented. For $2^{\text {nd }}$ year students seminar presentation carries 2 credits for their project work.
(ii )Research Scholars Seminar: A weekly seminar is conducted by the Department for research scholars. In this seminar one research scholar delivers a presentation on a topic in the area of his/her research. It is mandatory for every research scholar to deliver at least one seminar presentation in a semester.
(iii) Guest Lectures: The Department regularly organizes Guest Lectures by Mathematicians from other Universities for students \& Research Scholars. Prof. B. Ramakrishnan, HRI, Allahabad delivered a lecture entitled "Convolution sums of the divisor function and representation numbers of certain quadratic forms" on $2^{\text {nd }}$ June 2015.
The Board noted the reported position and all members of the Board including Expert Members expressed satisfaction on the progress made by the Department in terms of course development, teaching, research \& other related activities.

### 6.4 Agenda Items:

6.4.1 Revision of courses of study of M.Sc.(Mathematics) programme and courses offered to B.Tech. and Ph.D. Programme: Dr. A. K. Das, presented the changed course structure and curriculum of the M.Sc. (Mathematics) programme and others courses offered to B.Tech. and Ph.D. programme as discussed and suggested in the Workshop which has been approved by the Board. (Annexure-6A)
6.4.2 Introduction of course entitled "Sequence Spaces" for Ph.D. course work: The course entitled "Sequence Spaces" proposed by Dr Kuldeep Raj was discussed and approved by the Board. (Annexure-6B)

### 6.4.3 Introduction of course entitled "Measures of Uncertainty" for Ph.D. course work: The course entitled "Measures of Uncertainty" proposed by Dr Surender Singh was discussed and approved unanimously. (Annexure-6C)

6.4.4. Head, Department of Mathematics informed the members that the Department is in the process to start two new programmes (i) 5-year dual degree M.Sc.(Mathematics) programme and (ii) 2-year M.Tech. programme in Industrial Mathematics and Scientific Computing which was highly appreciated by external expert members.

The Meeting ended with a vote of thanks to the Chair.

(A. K. Das)

Head I/C, DoM

No: SMVDU/DOM/2016/ Ч2৭3
Dated: $6^{\text {Th }}$ June 2016
To
Dean, Faculty of Sciences, CC:

- Registrar, for information \& needful please.
- PS to VC for kind information of the Hon'ble Vice Chancellor.
- All members.
- Concerned File.

