PhD Summary

Doctoral Thesis of Dr. Poonam Sarohe, Assistant Professor, Department of Mathematics, Lakshmibai College, University of Delhi

Title of the thesis- Generalizations of prime and primary ideals in commutative semirings

Supervisor- Dr. Pratibha Kumar, Associate Professor, Kirori Mal College., Delhi University.

Co. Supervisor- Late Dr. Manish Kant Dubey, DRDO, SAG, Metcalf House, DRDO Complex, Delhi 110054.

I was on study leave from 1st August 2013 to 29th July 2016. This report summarized my PhD research work from August 2013 to July 2016. I have already submitted my six months reports to the college timely, during my 3 years of study leave. As stated in my reports, i have published 7 papers in International Journal, which are as follows:-

- **Manish Kant Dubey and Poonam Sarohe,** On 2-absorbing Semimodules, Quasigroups and Related Systems 21 (2013), 175-184.

- **Manish Kant Dubey and Poonam Sarohe**, Generalizations of Prime Subsemimodules, Southeast Asian Bulletin of Mathematics, 39: 469–476 (2015).
- **Pratibha Kumar, Manish Kant Dubey and Poonam Sarohe**, Some Results on 2-absorbing Ideals in Commutative Semirings, Journal of Mathematics and Applications, JMA No 38, pp 77-84 (2015).
- **Manish Kant Dubey and Poonam Sarohe**, On (n-1, n)-phi-prime ideals in semirings, Matematicki Vesnik Journal, 67, 3 222–232 (2015).
- **On 2-absorbing ideals in commutative semirings,** Quasigroups and Related Systems, 24, 67 – 74 (2016).
- **Pratibha Kumar, Manish Kant Dubey and Poonam Sarohe**, On 2-Absorbing Primary Ideals in Commutative Semirings, European Journal of Pure and Applied Mathematics, Vol. 9, No. 2,186-195 (2016).
- **Manish Kant Dubey and Poonam Sarohe** , Generalizations of Prime and Primary Ideals in Commutative Semirings, Southeast Asian Bulletin of Mathematics ,Vol. 41, 9–20 (2017).

I had submitted my PhD thesis on 29th July 2016 and I was conferred the degree on 18th November 2017. A copy of my PhD degree was submitted by me after I joined college on 29th July 2016.