CHAPTER 65

THESES OF THE PREVIOUS YEAR

(A List of Theses Accepted for Awarded of the Degree of Ph.D. in 90th Annual Convocation-2013)

Doctoral Theses

METHEMATICS

704. DATT (Gopal)

Multiplication and Composition Induced Operators on Lorentz Spaces.

Supervisor: Prof. S. C. Arora

Th 19118

Contents

1. Introduction. 2. Multiplication operators: Lorentz spaces. 3. Multiplication operators: Lorentz-bochner spaces. 4. Composition operators: Lorentz spaces. 5. Weighted composition operators. 6. Open problems. References.

705. JAIN (Neeru) NEE NEERU SINGAL

Contributions to the Theory of Ordered and Fuzzy Topological Structures.

Supervisor : Dr. Shashi Prabha Arya Th 19117

Contents

Basic definitions and preliminaries. 1. The locally finite sum theorem. 2. Paracompact ordered spaces. 3. Ordered connectedness and strong order semi-continuity. 4. Basic definitions and preliminaries. 5. Some forms of fuzzy continuity. 6. Fuzzy subweakly continuous functions. 7. Fuzzy weak continuity, fuzzy almost continuity and fuzzy pre-continuity. 8. Fuzzy subweakly α -continuous functions. 9. Some weaker forms of fuzzy weak continuity. 10. Fuzzy somewhat continuous functions. 11. Fuzzy ordered connectedness and fuzzy ordered α -continuous functions.

706. KAPOOR (Reena)

Various Techniques for Linearizing Binary Non-Linear Programming Problems.

Supervisor: Dr. S. R. Arora

<u>Th 19116</u>

Contents

1. Introduction. 2. Linearization and various complexity issues of 0-1 quadratic fractional programming problem. 3. Crisp linearization strategies for an unrevealed branch of general linear fractional programming problem and 0-1 multi-quadratic fractional programming problem. 4. A condensed linearization of 0-1 polynomial and multi-polynomial fractional programming problem after a simple reformulation. Appendix and references.