### PERSONAL PROFILE

## Dr Jagbir Singh, Department of Mathematics, M.D.University, Rohtak

1. Name : Jagbir Singh

2. Father's Name : Sh. Jagdish Chand

**3. Date of Birth** : 26-12-1983

**4. Designation** : Assistant Professor

**5.** Name of the Department : Department of Mathematics

M.D.University, Rohtak

**6. Date of Joining the University** : July 13, 2010

**7. Teaching Experience** : 7 years

**8. Specialization** : Algebra, Number theory, Algebraic Coding

Theory

**9. Research Experience** : 8 years

10. M.Phil Students Guided

i) Rekha, Expression of Primitive Idempotents for Cyclic Codes of Length  $16p^n$ , June 06, 2016

ii) Anju, Primitive Idempotents in  $R_{16p^n}$ , April 29, 2016.

iii) Urmil, Minimum Distance Bounds for Some Cyclic Codes of Length 16p<sup>n</sup>,
January 04, 2017

iv) Anshu Sharma, Generating Polynomials for Some Cyclic Codes of Length 16p<sup>n</sup>, January 19, 2017

v) Amit Kumar, Parameters of Some Cycic Codes, August 08, 2017

11. Ph.D. Students Guiding

i) Sonika, Minimal Cyclic Codes of Length 4p<sup>n</sup> over GF(q) with order of q modulo 4p<sup>n</sup> as  $\frac{\phi(p^n)}{d}$ , registered on Dec. 04, 2014.

- ii) Sonu, Generating Idempotents of Minimal Ideals in  $R_{8p^n} = \frac{GF(q)[x]}{< x^{8p^n} 1>} \text{ and corresponding codes with order of q}$  modulo  $8p^n$  as  $\frac{\phi(p^n)}{d}$ , registered on Dec. 04, 2014.
- iii) Prateek Mor, Structure and Construction of Some Generalized Cyclic Codes, registered on March 01, 2017.
- iv) Urmil, Numerical Solution for Some Singularly Perturbed Problems, Registered on......

## 12. Educational Qualifications

Sr. No.	Degree	Year	University/Institute
1.	Ph.D.	2014	M.D. University, Rohtak
2.	NET	2007	CSIR-HRDG (UGC)
3.	M.Sc.	2005	M.D. University, Rohtak
	Mathematics		
4.	B.A.	2003	M.D. University, Rohtak

## 13. Participation in Conferences/Seminars/ Workshops

## a.) Attended

- Participated in Inter-national Conference on Mathematical Analysis and Its Applications (ICMAA-2016) at Department of Mathematics, IIT Roorkee during November 28 - December 02, 2016
- ii) Participated in Inter-national Conference on Recent Trends in Mathematical Analysis and Its Applications (ICRTMAA-2014) at Department of Mathematics, IIT Roorkee during December 21-23, 2014
- iii) Participated in Seminar on Official Statistical at Department of Statistics,MDU Rohtak on February 18, 2014
- iv) Participated in National Workshop on Predictive Mathematical Models in Science and Engineering (PMMSE - 2013) at Department of Mathematics, NIT, Kurukshetra during May 24-25, 2013

- v) Participated in Workshop on Applicability of Statistical Tools using SPSS at Department of Mathematics, MDU, Rohtak on May 13, 2013
- vi) Participated in National Workshop on Mathematical and Its Applications at Department of Mathematics, DCRUST, Murthal, Sonepat during October 18-19, 2012

### **b.)** Paper Presented

- i) Attended and Presented Paper entitled "Explicit Expression of Primitive Idempotents and Corresponding Codes of Length 8p" in National Seminar on Recent Developments in Mathematical Sciences (NSRDMS) held at Department of Mathematics, Maharshi Dayanand University, Rohtak during March 07-08, 2017.
- ii) Attended and Presented Paper entitled "Some Minimal Cyclic Codes of Length 8p"" in National Conference Mathematics and its Applications in Science & Technology (MAST16) held at Guru Jambheshwar University of Science & Technology, Hisar during November 9-10, 2016.
- iii) Attended and Presented Paper entitled "Some Cyclic Codes of Length 4p<sup>n</sup>" in National Conference on Recent Trends and Developments in Statistics (NCRTDS) held at Department of Statistics, Maharshi Dayanand University, Rohtak during February 21-23, 2015.
- iv) Attended and Presented Paper entitled "Minimal Cyclic codes of length 8p<sup>n</sup> over GF(q), where q is prime power and of the form 8k+1" in National Seminar on Applications and Role of Mathematics in Engineering & Social Sciences held at BLJS College, Tosham during March 26-27, 2014.
- v) Attended and Presented Paper entitled "Minimal Cyclic codes of length 8p<sup>n</sup> over GF(q), where q is prime power and of the form 8k+5" in International Conference on History and Development of Mathematical Sciences & Symposial on Nonlinear Analysis (ICHDMS 2013) held at Department of Mathematics, MDU Rohtak during November 21-24, 2012.
- vi) Attended and Presented Paper entitled "Survey of Primitive Idempotents in Cyclic Group Algebras" in National Conference on Spectrum of Information

Technology Developments at India's Perspective (SIT@IP - 2012) held at Baba Budha College, Bir Sahib, Tarantaran during February 17-18, 2012.

## c.) Organizer

- Member of Organizing Team of One Day Workshop on All India Survey on Higher Education held at Maharshi Dayanand University, Rohtak on March 17, 2017.
- ii) Member of Organizing Committee of National Seminar on Recent Developments in Mathematical Sciences (NSRDMS) held at Department of Mathematics, Maharshi Dayanand University, Rohtak during March 07-08, 2017.
- iii) Member of Organizing Team of One Day Workshop on Mathematics: Recent Developments and Scope held at Department of Mathematics, Maharshi Dayanand University, Rohtak on October 21, 2016.
- iv) Member of Organizing Committee of International Conference on History and Development of Mathematical Sciences & Symposial on Nonlinear Analysis (ICHDMS - 2013), held at Department of Mathematics, Maharshi Dayanand University, Rohtak during November 21-24, 2012.

#### 14. Papers Published

- Jagbir Singh, S.K. Arora, Sheetal Chawla, Some Cyclic Codes of Length 8p<sup>n</sup>, International Journal of Pure and Applied Mathematics, Volume 116(1) 2017, pp 217-241. (ISSN: 1314-3395)
- ii) Sheetal Chawla, Jagbir Singh, Rekha Devi; Expression for Primitive Idempotents in  $FC_{16p^n}$ , International Journal of Statistika and Mathematika, Vol 21(2), 2016, pp 13-25. (ISSN: 2249-8605)
- iii) Sheetal Chawla, Jagbir Singh; A Note on Orthogonal Idempotents in FG, G is an Abelian Group, AryaBhatta Journal of Mathematics and Informatics, Vol 7(2), 2015, pp 359-364. (ISSN: 0975-7139)
- iv) Jagbir Singh and S.K. Arora, Minimal Cyclic codes of length 8p<sup>n</sup> over GF(q), where q is prime power and of the form 8k+5, Journal of Applied Mathematics and Computing (Springer), Vol 48, 2015, pp 55-69. (ISSN: 1865-2085)

- v) Sheetal Chawla, Jagbir Singh; Cyclic Codes of Length  $4p^n$  over GF(q), where q is Prime Power of the form 4k+1, AryaBhatta Journal of Mathematics and Informatics, Vol 6(2), 2014, pp 373-380. (ISSN: 0975-7139)
- vi) Dalip Singh, Jagbir Singh and Pankaj Arora, Some Idempotents in Abelian Group Algebra, International Journal of Statistika and Mathematika, Vol 10(2), 2014, pp 36-41. (ISSN: 2249-8605)
- vii) Jagbir Singh and S.K. Arora, Idempotents in Abelian Group Algebra FG, where G is an Abelian group of order  $2^n$  and F is Field of order  $q = 2^n\lambda + 1$ , Internationl Journal of Applied Sciences & Technology Research Excellence, Vol 2(5), 2012, pp 22-27. (ISSN: 2250 2726)
- viii) Jagbir Singh and S.K. Arora, Primitive Idempotents in Cyclic Group Algebra, International Journal of Pure & Applied Sciences, Vol 01(2), 2012. (ISSN: 2250 2289)

# 15. Membership in Societies

- i) Life Member of Indian Mathematical Society.
- ii) Life Member of Ramanujan Mathematical Society.
- iii) Life Member of Calcutta Mathematical Society.
- iv) Life Member of Indian Society of Information Theory & Applications.

## 16. Contribution in Departmental/University Committees

- i) Member, Inspection Committee regarding grant of Extension in M.Sc. (Math) 2<sup>nd</sup> Year and its continuation in 1<sup>st</sup> Year and M.A. (English) 2<sup>nd</sup> Year and its continuation in 1<sup>st</sup> Year at Govt College for Women, Narnaul, Mohindergarh w.e.f the session 2017-18.
- ii) Member, Coordination Committee for Centralised Online Admissions for the session 2017-18.
- iii) Coordinator of Alumni Association at Departmental Level from 20.09.2016 to till date.
- iv) Coordinator of Internal Quality Assurance Cell (IQAC) at Departmental Level from 11/8/2014 to till date.

- v) Member of various admission committees for M.Sc. Mathematics/M.Sc. Mathematics with Computer Science/ 5-Year Integrated M.Sc. (Hons) Maths / M.Phil (Mathematics).
- vi) Member of Departmental Time-Table Committee
- vii) Member of the Eco-Club of the Department.
- viii) Member of Committee for Framing and Updation of Syllabi
- ix) Member of Committee for Cultural Programme on the occasion of Welcome / Farewell Party of the students.
- x) Member of Committee for Parent Teacher's Meet (Students' support Activity).
- xi) Member of 5 days educational tour to Manali and nearby places organized by the Department (Session 2014-2015).

#### 17. Books Edited

- Advanced Abstract Algebra, Directorate of Distance Education, Maharshi
   Dayanand University, Rohtak (2015-16)
- ii) Partial Differential Equations and Mechanics, Directorate of Distance Education, Maharshi Dayanand University, Rohtak (2015-16)

#### 18. Other Contributions

- i) Attended the Orientation Course held at B.P.S. Mahila Vishwavidyalaya Khanpur Kalan from April 22, 2014 to May 20, 2014.
- ii) Attended the 1st Refresher Course in Mathematics held at B.P.S. Mahila Vishwavidyalaya Khanpur Kalan from December 22, 2010 to January 12, 2011.

(Jagbir Singh)