




# CURRICULAM-VITAE



Title	Dr.	First Name	Chaman	Last Name	Singh	Photograph
Designation	Assistant Professor					
Address	Acharya Narendra Dev College, (University of Delhi) Govindpuri, Kalkaji, Delhi-110019					
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Web-Page	<a href="https://sites.google.com/view/chamansingh/home">https://sites.google.com/view/chamansingh/home</a>					
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	D.N. (P.G.) College, C.C.S. University Meerut (Development and Analysis of some supply chain systems in crisp and fuzzy environment)				2014	
PG	Meerut College, C.C.S. University Meerut				2006	
UG	Agarsen P.G. College, C.C.S. University Meerut				2004	
Any other qualification	N.A.				N.A.	
Career Profile						
<ol style="list-style-type: none"><li>1. April 2009 – November 19, 2012 - Assistant Professor, Dept. of Mathematics, Acharya Narendra Dev College (University of Delhi).</li><li>2. November 19, 2012 – January 5, 2015 - Fellow in Mathematics (On Deputation) at Institute of Lifelong Learning, University of Delhi.</li><li>3. January 6, 2015 to till date - Assistant Professor, Dept. of Mathematics, Acharya Narendra Dev College (University of Delhi).</li></ol>						
Administrative Assignments						
<ol style="list-style-type: none"><li>1. Member, Academic Council, University of Delhi.</li><li>2. Teacher-in-Charge, Department of Mathematics, Acharya Narendra Dev College, Since 2018-2020.</li><li>3. Liaison Officer(OBC), Acharya Narendra Dev College, University of Delhi.</li><li>4. Worked as Sports Committee Convenor during July 2010 to June 2012.</li><li>5. Worked as Observer for Delhi University Examination during Jan 2013, May-June 2013, December 2013-Jan 2014 and May-June 2014.</li><li>6. Coordinated the E-Content writing for the National Mission on Education.</li><li>7. Coordinated the E-Content writing for the courses in DC-I Mathematics.</li><li>8. Worked as reviewer for E-Content writing for the courses in DC-I Mathematics.</li></ol>						

9. Worked as Editor of E-books writings for the courses in B.Sc.(Hons.) Mathematics, at ILLL, University of Delhi from November 2012 to January 2015.

#### Areas of Interest / Specialization

1. Optimization
2. Inventory Control
3. Supply Chain Management

#### Subjects Taught

1. Calculus
2. Differential Equations
3. Real Analysis
4. Numerical Analysis
5. Probability Theory and Statistics

#### Research Guidance

1. Co-supervisor of Ms. Kamna Sharma, for her Ph.D. Thesis entitled “Development and Analysis of Some Inventory Models with Product Stewardship” Department of Applied Mathematics School of Vocational Studies and Applied Sciences, Gautam Buddha University, Greater Noida.
2. Co-supervisor of Ms. Kanika Ahuja, for her dissertation entitled “Study of Some Inventory Models in Imprecise Environment” student of M.Sc. Applied Mathematics, Amity University.
3. Supervised the ELITE project for the undergraduate students entitled “Predicting the win of a political party using non-cooperative game theory” funded by the Acharya Narendra Dev College (University of Delhi).
4. Supervised the ELITE project for the undergraduate students entitled “Investigating recent trends in modeling of deteriorating inventory” funded by the Acharya Narendra Dev College (University of Delhi).

#### Publications Profile

### **Book Published**

- ❖ Co-author “Fuzzy Set Theory for M.Sc. Students” Published Krishna Educational Publishers, Meerut with ISBN 81-8283-226-8 (2012).
- ❖ “Maths Magic for class 6” Published by EDUWELL BOOKS Educational Publisher, Meerut with ISBN 81-8186-212-0. (2009)
- ❖ “Maths Magic for class 7” Published by EDUWELL BOOKS Educational Publisher with ISBN 81-8186-213-9. (2009)
- ❖ “Maths Magic for class 8” Published by EDUWELL BOOKS Educational Publisher with ISBN 81-8186-214-7. (2010)

### **E-Book Edited**

- ❖ “Calculus-I for B.Sc.(Hons.) Students” uploaded on ILLL portal vle.du.ac.in with ISSN 978-93-85611-22-3. (2014)
- ❖ “Analysis-I for B.Sc.(Hons.) Students” uploaded on ILLL portal vle.du.ac.in with ISSN 978-93-85611-24-7. (2014)
- ❖ “Differential Equations-I for B.Sc.(Hons.) Students” uploaded on ILLL portal vle.du.ac.in with ISSN 978-93-85611-25-4. (2014)
- ❖ “Analysis-II (Real Function) for B.Sc.(Hons.) Students” uploaded on ILLL portal vle.du.ac.in with ISSN 978-93-85611-26-1.(2015)
- ❖ “Numerical Methods for B.Sc.(Hons.) Students” uploaded on ILLL portal vle.du.ac.in with ISSN 978-93-85611-27-8. (2015)

### **Chapters for Developing E-Content**

1. **Chaman Singh** and Kapil Kumar "Numerical Differentiation" in paper "Numerical Methods" for B.Sc. (H.) Mathematics uploaded on ILLL, vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

Link: [https://docs.google.com/file/d/0B0Izh6GcIA\\_DdGJHQW5WR1BaWjg/edit?pli=1](https://docs.google.com/file/d/0B0Izh6GcIA_DdGJHQW5WR1BaWjg/edit?pli=1)

2. **Chaman Singh** and Brijendra Kumar Yadav "Rank of Matrices" in paper "Algebra-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DSDRRVHFzSUR4dVE/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DSDRRVHFzSUR4dVE/edit)

3. **Chaman Singh** "Eigen Values and Eigen Vectors" in paper "Algebra-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DT1FWcFdVN1o2T3c/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DT1FWcFdVN1o2T3c/edit)

4. **Chaman Singh** and Kapil Kumar "Sketching of Graphs Using Derivatives" in paper "Calculus-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_Dai1IUEtJT0hMeDA/edit?pli=1](https://docs.google.com/file/d/0B0Izh6GcIA_Dai1IUEtJT0hMeDA/edit?pli=1)

5. **Chaman Singh** and Brijendra Yadav "Limits and Continuity of Vector Functions" in paper "Calculus-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DRG1vazhYYXc2aUE/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DRG1vazhYYXc2aUE/edit)

6. **Chaman Singh** and Kapil Kumar "Differentiation and Integration of Vector Functions" in paper "Calculus-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DbjMwb0hHay16RXc/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DbjMwb0hHay16RXc/edit)

7. **Chaman Singh** "Linear Transformations" in paper "Algebra-I" for B.Sc. (H.) Mathematics, under NME-ICT: MHRD Project, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DMDVSOUp4Q21USVE/edit?pli=1](https://docs.google.com/file/d/0B0Izh6GcIA_DMDVSOUp4Q21USVE/edit?pli=1)

8. **Chaman Singh** "Method of Separation of Variables" in paper "Differential Equations and Mathematical Modeling II" for B.Sc. (H.) Mathematics, under NME-ICT: MHRD Project, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DaEtpMFZmYIM4WjA/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DaEtpMFZmYIM4WjA/edit)

9. Brijendra Yadav and **Chaman Singh** "Numerical Solutions of Algebraic Equations:

Iterative Methods" in paper "Numerical Methods" for B.Sc. (H.) Mathematics uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DWUIBMGUtZ2IUUjA/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DWUIBMGUtZ2IUUjA/edit)

10. Brijendra Yadav and **Chaman Singh** "Numerical Solutions of Algebraic Equations: Direct Methods" in paper "Numerical Methods" for B.Sc. (H.) Mathematics uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DUzdMTkhWeTZ6eGs/edit?pli=1](https://docs.google.com/file/d/0B0Izh6GcIA_DUzdMTkhWeTZ6eGs/edit?pli=1)

11. Kapil Kumar and **Chaman Singh** "Error in Numerical Computations" in paper "Numerical Methods" for B.Sc. (H.) Mathematics uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DRnVIY3JGdkVKbEU/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DRnVIY3JGdkVKbEU/edit)

12. Kapil Kumar and **Chaman Singh** "Archimedean Property and Density of Rational (Irrational) Numbers in  $\mathbb{R}$ " in paper "Analysis-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DcGo3a055MWhHWDA/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DcGo3a055MWhHWDA/edit)

13. Brijendra Yadav and **Chaman Singh** "Completeness Property of  $\mathbb{R}$ " in paper "Analysis-I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DeGFoeldnUHgwR0k/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DeGFoeldnUHgwR0k/edit)

14. Kapil Kumar and **Chaman Singh** "Method of Undetermined Coefficients and Variation of Parameters" in paper "Differential Equations -I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DYVc2dFZTV1dpMGM/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DYVc2dFZTV1dpMGM/edit)

15. Brijendra Yadav and **Chaman Singh** "Solutions of Homogeneous Linear Differential Equations" in paper "Differential Equations -I" for B.Sc. (H.) Mathematics, uploaded on vle.du.ac.in, ISSN 2349-154X. Institute of Lifelong Learning, University of Delhi.

[https://docs.google.com/file/d/0B0Izh6GcIA\\_DV3V3S3JsS1AxVIE/edit](https://docs.google.com/file/d/0B0Izh6GcIA_DV3V3S3JsS1AxVIE/edit)

### List of Research Papers Published in the International Journals

1. Singh, S.R., **Singh, C.**, (2020). Supply chain model for expiring items following ramp-type demand with stochastic lead time under crisp and fuzzy environment, *International Journal Of Fuzzy System Applications* (ISSN 2156-177X), 9(1), 64-91. **(UGC LIST-YES, SCOPUS CITE SCORE-0.94)**
2. Kumar, S., **Singh, C.**, Prasad, S.N., Shekhar, C., Aggarwal, R., (2019). Synchronization of fractional order Rabinovich-Fabrikant systems using sliding mode control techniques, *Archives of Control Sciences*, Vol. 29(LXV), No. 2, 307-322. ISSN: 2300-2611. UGC CARE LIST-YES, IF-1.559.
3. Verma, S. K., Rizwanullah, Mohd., **Singh, C.**, (2019). An Optimal Policy for Deterministic Model for Time Proportional Deteriorated Inventory with Different Demand Rate Pattern, *Journal of Advance Research in Dynamical & Control Systems*, Vol. 11(1), 1323-1336. ISSN: 1943-023X, UGC CARE LIST-YES, SCOPUS, CITE SCORE-0.31.
4. Verma, S. K., Rizwanullah, Mohd., **Singh, C.**, (2018). An EOQ Model for Deteriorating Items with Selling Price Dependent Exponential Demand for Time Varying Holding and Deterioration Costs, *International Journal of Engineering & Technology*, 7 (4.41) 36-41. ISSN: 2227-524X, UGC CARE LIST-YES, SCOPUS.
5. Sharma, A., Sharma, U., **Singh C.**, (2018). An analysis of replenishment model of deteriorating items with ramp-type demand and trade credit under the learning effect, *International Journal of Procurement Management* (ISSN 1753-8440), 11(3), 313-342. **(UGC LIST- YES, SCOPUS CITE SCORE-1.18)**
6. Sharma, A., Sharma, U., **Singh C.**, (2017). A robust replenishment model for deteriorating items considering ramp-type demand and inflation under fuzzy environment, *International Journal of Logistics Systems and Management* (ISSN 1742-7975), 28(3), 287-307. **(UGC LIST- YES, SCOPUS CITE SCORE-1.31)**
7. **Singh, C.**, Singh, S.R., (2017). Supply chain model with two storage facility for stock dependent demand incorporating learning and inflationary effect under crisp and fuzzy environment, *International Journal of Fuzzy System Applications* (ISSN. 2156-177X), 6(2), 82-109. **(UGC LIST- YES, SCOPUS CITE SCORE-0.94)**

8. **Singh, C.,** Singh, S.R., (2015). Progressive trade credit policy in a supply chain with and without stock-out for supplier's lead time under inflationary and fuzzy environment, *Systems Science & Control Engineering: An Open Access Journal* (ISSN. 2164-2583), 3, 284-299. DOI 10.1080/21642583.2015.1018555. **(UGC LIST- YES, SCOPUS CITE SCORE-1.77)**

<http://www.tandfonline.com/doi/full/10.1080/21642583.2015.1018555>

9. Sharma, A., **Singh, C.,** Sharma, U., (2014). Deterministic Inventory model for deteriorating items with Ramp-type demand in inflationary environment, *International Journal of Inventory Control and Management* (ISSN. 0975-3729 Print), 4(1-2), 285-290. **(UGC LIST- NO)**

10. **Singh, C.,** Solanki, A., Sharma, K., (2014). Optimization Policy of a System for Deteriorating Items with Customer Returns and Partial Backlogging under Inflation, *International Journal of Inventory Control and Management* (ISSN. 0975-3729 Print), 4(1-2), 322-334. **(UGC LIST- NO)**

11. **Singh, C.,** Singh, S.R., (2013). Optimal ordering policy for deteriorating items with power-form stock dependent demand under two-warehouse storage facility, *OPSEARCH* (ISSN. 0030-3887 Print and 0975-0320 Electronics), 52(2), 182-196. DOI 10.1007/s12597-012-0105-2. [India, **Indexing:** SCOPUS, Zentralblatt Math, Google Scholar, ProQuest] **(SJR: 0.26) (H Index: 6) (UGC LIST- YES, SCOPUS CITE SCORE-1.14)**

<http://link.springer.com/article/10.1007/s12597-012-0105-2>

12. **Singh, C.,** Singh, S.R., (2013). Vendor-buyers relationship model for deteriorating items with shortages, fuzzy trapezoidal costs and inflation, *Yugoslav Journal of Operations Research* (ISSN 0354-0243), 23(1), 73-85. DOI: 10.2298/YUJOR110421022S. [Serbia, **Indexing: Mathematical Reviews, International Abstracts in Operations Research, Zentralblatt für Mathematik**] **(SJR: 0.53) (H Index: 8) (UGC LIST- YES, SCOPUS CITE SCORE-0.5)**

<http://yujor.fon.bg.ac.rs/index.php/journal/article/view/1018>

13. **Singh, C.,** Singh, S.R., (2012). An EPQ model with power-form stock dependent

demand under inflationary environment using genetic algorithm, *International Journal of Computer Applications* (ISSN 0975-8887), 48(15), 25-30. [USA, **Indexing:** ProQuest, Google Scholar, DOAJ (Directory of Open Access Journal), ScientificCommons] **(Impact Factor: 0.79) (UGC LIST- NO)**

<http://www.ijcaonline.org/archives/volume48/number15/7426-0438>

14. **Singh, C.,** Singh, S.R., (2012). Integrated supply chain model for perishable items with trade credit policy under imprecise environment, *International Journal of Computer Applications* (ISSN 0975-8887), 48(20), 36-40. [USA, **Indexing:** ProQuest, Google Scholar, DOAJ (Directory of Open Access Journal), ScientificCommons] **(Impact Factor: 0.79) (UGC LIST- NO)**

<http://www.ijcaonline.org/archives/volume48/number20/7468-0592>

15. **Singh, C.,** Singh, S.R., (2012). An EPQ model with stock dependent demand under imprecise and inflationary environment using genetic algorithm, *International Journal of Engineering Research & Technology* (ISSN 2278-0181), 1(4), 1-13. [**Indexing:** DOAJ, EBSCO, Google Scholar, Scientific Commons, CiteseerX, getCITED, Index Copernicus] **(Impact Factor: 1.76) (UGC LIST- NO)**

<http://www.ijert.org/browse/june-2012-edition>

16. **Singh, C.,** Singh, S.R., (2011). Imperfect production process with exponential demand rate, weibull deterioration under inflation, *International Journal of Operational Research* (ISSN 1745-7653), 12(4), 430-445. [U.S.A., **Indexing:** [Scopus \(Elsevier\)](#), [Scirus \(Elsevier\)](#)] **(SJR: 0.41) (H Index: 14) (UGC LIST- YES, SCOPUS CITE SCORE- 0.82)**

<http://www.inderscience.com/info/inarticle.php?artid=43551>

17. **Singh, C.,** Singh, S.R., (2011). An integrated supply chain model for the perishable items with fuzzy production rate and fuzzy demand rate, *Yugoslav Journal of Operations Research* (ISSN 0354-0243), 21(1), 47-64. [Serbia, **Indexing:** **Mathematical Reviews, International Abstracts in Operations Research, Zentralblatt für Mathematik**] **(SJR: 0.53) (H Index: 8) (ISSN 0354-0243) (UGC LIST- YES, SCOPUS CITE**



**SCORE-0.5)**

<http://www.doaj.org/doaj?func=abstract&id=782926&recNo=4&toc=1&uiLanguage=en>

18. **Singh, C., Singh, S.R.**, (2010). Two echelon supply chain model with imperfect production, for weibull distribution deteriorating items under imprecise and inflationary environment, *International Journal of Operations Research and Optimization* (ISSN 0975-3737), *1(1)*, 9-25. [India, **Indexing:** ProQuest] (**UGC LIST- NO**)

<http://www.aacsjournals.com/newabstract.php?IJORO&11&1&2010&1&January-June#>

19. Singh, S.R., **Singh, C.**, (2010). Supply chain model with stochastic lead time under imprecise partially backlogging and fuzzy ramp-type demand for expiring items, *International Journal Of Operational Research* (ISSN 1745-7653), *8(4)*, 511-522. [U.S.A., **Indexing:** [Scopus \(Elsevier\)](#), [Scirus \(Elsevier\)](#), [Google Scholar](#)] (**SJR: 0.41**) (**H Index: 14**) (**UGC LIST- YES, SCOPUS CITE SCORE-0.82**)

<http://www.inderscience.com/info/inarticle.php?artid=34866>

20. Singh, S.R., **Singh, C.**, (2008). Fuzzy inventory model for finite rate of replenishment using signed distance method, *International Transactions in Mathematical Sciences and Computer* (ISSN 0974-5068), *1(1)*, 27-34. [India, **Indexing:** ProQuest] (**UGC LIST- NO**)

[http://www.aacsjournals.com/newabstract.php?Journal=ITMSC&Journal\\_Id=1&Volume=1&Volume\\_no=1&Volume\\_year=2008&Issue=1&Issue\\_id=1&Month=July-December#/17%20ITMSC.11.docx](http://www.aacsjournals.com/newabstract.php?Journal=ITMSC&Journal_Id=1&Volume=1&Volume_no=1&Volume_year=2008&Issue=1&Issue_id=1&Month=July-December#/17%20ITMSC.11.docx)

21. Singh, S.R., **Singh, C.**, Singh, T.J., (2007). Optimal ordering policy for decaying items with stock-dependent demand under inflation in a supply chain, *International Review of Pure and Applied Mathematics* (ISSN 0973-1350), *3(2)*, 189-197. [India, **Indexing:** [Scopus \(Elsevier\)](#), *Elsevier's bibliographic database*, EBSCOhost, MathSciNet] (**UGC LIST- NO**)

<http://www.serialspublications.com/contentnormal.asp?jid=297&jtype=1>

22. Singh, T.J., Singh, S.R., **Singh, C.**, (2007). Perishable inventory model with quadratic demand, partial backlogging and permissible delay in payments, *International Review of*

*Pure and Applied Mathematics* (ISSN 0973-1350), 3(2), 199-212. [India, **Indexing: Scopus (Elsevier)**, Elsevier's bibliographic database, EBSCOhost, MathSciNet] (**UGC LIST- NO**)

<http://www.serialspublications.com/contentnormal.asp?jid=297&jtype=1>

**List of Research Papers Published in the Proceedings of International / National Conferences:**

1. Saxena P., **Singh C.**, Sharma K., (2018). EPQ Model with Product Stewardship Approach, *Advances in Intelligent Systems and Computing*, vol 583, 107-113. Springer, Singapore, DOI [https://doi.org/10.1007/978-981-10-5687-1\\_10](https://doi.org/10.1007/978-981-10-5687-1_10), Print ISBN 978-981-10-5686-4, Online ISBN 978-981-10-5687-1.
2. **Singh, C.**, Sharma, K., Singh, S.R., (2016). A Production model with stock-dependent demand, partial backlogging, Weibull distribution deterioration and customer returns, *Proceeding of fifth International Conference on Soft Computing for Problems Solving Organized by IIT Roorkee, December 18-20, 2015. Advances in Intelligent Systems and Computing vol 436,17-19.* [https://doi.org/10.1007/978-981-10-0448-3\\_2](https://doi.org/10.1007/978-981-10-0448-3_2) Print ISBN 978-981-10-0447-6.
3. Kumar, K., **Singh, C.**, Singh, S.R., (2015). EPQ model for Imperfect Items with Variable Demand under the Effect of Inflation and Permissible Delay in Payments, *Proceeding of Conference on Advance Techniques and Devices in Mathematics and Physical Sciences: An International Meet, organized by Department of Mathematics & Physics, SRM University, Delhi-NCR Campus, Ghaziabad, January 23-25, 2015.* [India] (ISSN-978-93-84935-11-5).
4. Sharma, K., Singh, S.R., **Singh, C.**, (2015). EPQ model for deteriorating items under customer returns with shortage and partial backlogging, *Proceeding of 3rd International Conference on Reliability, Infocom Technologies and Optimization 2014 organized by Amity Institute of Information Technology, Amity University, Uttar Pradesh, October 8-10, 1-4.* [India] (ISSN-978-1-4799-6896-1).
5. **Singh, C.**, Singh, S.R., (2011). Supply chain model incorporating learning and inflationary effect on perishable items in a random planning horizon under imprecise

environment, *Proceeding of International Conference on Advances in Modeling, Optimization and Computing (AMOC) organized by Indian Institute of Technology, Roorkee, December 5-7, 482-492.* [India] (ISBN – 81-86224-71-2)

6. **Singh, C.**, Singh, S.R., (2009). Integrated Supply chain Model for Perishable Items with fuzzy production and fuzzy demand rates under inflation and time value of Money, *Proceeding of National Conference on Role of Management Science in Decision Making organized by Institute of Management Technology, Nagpur, February 13-14, 2009.* [India]

#### Publications in the Last one year

1. Singh, S.R., **Singh, C.**, (2020). Supply chain model for expiring items following ramp-type demand with stochastic lead time under crisp and fuzzy environment, *International Journal Of Fuzzy System Applications* (ISSN 2156-177X), 9(1), 64-91. **(UGC LIST-YES, SCOPUS CITE SCORE-0.94)**
2. Kumar, S., **Singh, C.**, Prasad, S.N., Shekhar, C., Aggarwal, R., (2019). Synchronization of fractional order Rabinovich-Fabrikant systems using sliding mode control techniques, *Archives of Control Sciences*, Vol. 29(LXV), No. 2, 307-322. ISSN: 2300-2611. UGC CARE LIST-YES, IF-1.559.
3. Verma, S. K., Rizwanullah, Mohd., **Singh, C.**, (2019). An Optimal Policy for Deterministic Model for Time Proportional Deteriorated Inventory with Different Demand Rate Pattern, *Journal of Advance Research in Dynamical & Control Systems*, Vol. 11(1), 1323-1336. ISSN: 1943-023X, UGC CARE LIST-YES, SCOPUS, CITE SCORE-0.31.

#### Conference Organization/ Presentations (in the last three years)

#### List of Research papers presented in International / National Conferences:

1. The paper entitled “A Production Inventory Model for Deteriorating Items with Price and Time Dependent Demand under Trade Credit” presented in National Seminar on Advanced in Operations Research and Mathematical Sciences, Feb 24-25, 2018 held at Vardhman College, Bijnor (U.P.).
2. The paper entitled “*Two Storage Model with Power Form Stock-Dependent Demand incorporating the Effect of Learning and Inflation*” presented in **National Seminar on Modelling and Its Application in Science and Technology**, March 22-23, 2013, held at IIMT Engineering College, Meerut, U.P.
3. The paper entitled “*Supply Chain Model with Imperfect Production Process under Flexibility and Reliability with Learning Effect*” presented in **National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences**, March 17-18, 2012, held at D.N. College, Meerut, U. P.
4. The paper entitled “*Optimal Ordering Policy for the Items with Power-form Fuzzy Stock-Dependent Demand and Imprecise Costs under Two-Storage Facility*” presented in **International Satellite Seminar of Role of Mathematics in Science and Engineering**, May 13-14, 2011, held at Graphic Era University, Dehradun, U.K.
5. The paper entitled “*Optimal Ordering Policy for Two-Warehouse Model with Power-form Stock-Dependent Demand*” presented in **3<sup>rd</sup> National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences**, Feb. 5-6, 2011, held at D.N. College, Meerut, U. P.
6. The paper entitled “*Supply chain model for deteriorating items with Trapezoidal costs under inflation*” presented in **2<sup>nd</sup> National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences**, Jan. 30-31, 2010, held at D.N. College, Meerut, U. P.
7. The paper entitled “*Vendor-buyers relationship model for the deteriorating items under fuzzy environment*” presented in **4<sup>th</sup> International Conference on Quality, Reliability and Infocom Technology (ICQRIT)**, organized by Society for Reliability Engineering, Quality and Operations Management, Dec. 18-20, 2009, held at University of Delhi, Delhi.
8. The paper entitled “*A single-vendor and multi-buyers inventory policy with fuzzy costs and shortages*” presented in **8<sup>th</sup> triennial conference of Association of Asian Pacific**

**Operational Research Societies (APORS-2009)**, organized by Operational Research Society of India (ORSI), Dec. 6-9, 2009 held at Jaipuria Institute of Management, Jaipur.

9. The paper entitled “*Three Echelon Supply Chain Model for Perishable Items with Imprecise Demand and Production Rates*” presented in **National Conference on Recent Trends in the Advancement of Astronomy and Applied Mathematics**, Nov. 14-15, 2009, organized by Department of Mathematics, SGRR(PG) College, Dehradun.
10. The paper entitled “*Integrated Supply chain Model for Perishable Items with fuzzy production and fuzzy demand rates under inflation and time value of Money*” presented in **National Conference on Role of Management Science in Decision Making** organized by Institute of Management Technology, Nagpur, *February 13-14, 2009*.
11. The paper entitled “*Integrated Supply chain model with trade credit policy under fuzzy environment*” presented in **VI International Symposium on Optimization and Statistics**, December 29-31, 2008, organized by Department of Statistics & Operations Research, Aligarh Muslim University, Aligarh.
12. The paper entitled “*An EPQ model with imperfect production process, ramp type demand rate under inflation and volume flexibility*” presented in **40<sup>th</sup> Annual Convention of Operational Research Society of India**, December 4-6, 2007, held at Department of Operations Research, University of Delhi, Delhi.

### **Invited Talks**

1. “Two Echelon Fuzzy Inventory Model for Deteriorating Items with Shortages” in **National Seminar on Computational Mathematics & Operations Research**, Nov. 28-29, 2009, organized by BK Birla Institute of Engineering & Technology Pilani (Rajasthan).

### **Workshops attended**

1. Seminar on Recent trends in Technical terminology in Science, Organized by Commission for Scientific and Technical Terminology, MHRD on 16-17 February 2016, at Sri Aurobindo College, University of Delhi.
2. Workshop on Computer Science & Differential Equations, organized by Deshbandhu College on March 7-8, 2014.
3. Workshop on Group theory and its application, organized by Deshbandhu College on

February 7-9, 2014.

4. “Workshop on Power of Ethics in Learning” Organized by Institute of Lifelong Learning, (University of Delhi), March 20-21, 2013, held at Institute of Lifelong Learning (University of Delhi).
5. Workshop on Mathematica Organized by Department of Mathematics, Acharya Narendra Dev College (University of Delhi), on March 1, 2013.
6. “Workshop on Maxima” Organized by Department of Mathematics, Acharya Narendra Dev College, (University of Delhi), on August 17, 2012, held at Acharya Narendra Dev College (University of Delhi).
7. “Workshop on Scilab and its Application” Organized by Acharya Narendra Dev College, (University of Delhi) and funded by NME-ICT, MHRD through IIT Bombay, from 10-11 March, 2011, held at Acharya Narendra Dev College (University of Delhi).
8. “Workshop on Mathematica” Organized by University of Delhi, South Campus on 8, December 2010, held at University of Delhi, South Campus.
9. “Workshop on Application of Free/Open Source Software in Science Teaching and Research” Organized by Acharya Narendra Dev College (University of Delhi) and NRCFOSS, Anna University Chennai, from April 14-15, 2010, held at Acharya Narendra Dev College (University of Delhi).
10. “Workshop Cum Training Programme on Modern Trends in Celestial Mechanics and Astronomy” Organized by Deshbandhu College (University of Delhi), on 17-19 March 2010 held at University of Delhi, Delhi.
11. Workshop on “Quality Assurance through Blended Learning” sponsored by UGC, on 19-21 January 2010 held at Maitreyi College, Delhi.
12. “Workshop on Mathematical Modeling and Related Optimization Techniques” Organized by Society for Reliability Engineering, Quality and Operations Management, on 14-17 December 2009 held at University of Delhi, Delhi.

#### Research Projects (Major Grants/Research Collaboration)

1. **NME-ICT: MHRD - Project:** Worked as Co-PI in Mathematics under Major Projected granted by MHRD to University of Delhi Total Grant (2,00,00,000/-).

2. **Innovation Project:** Development of portable Electronic Nose prototype with autonomous & stand-alone operation for quantified Ambient Air Pollution (AAP) measurement using wireless data transfer protocol on Android® enabled mobile phones (DU Innovation Project ANDC-304).

#### Awards and Distinctions

1. Won the first prize for the best paper presentation in the national conference on Role of Management Science in Decision Making organized by Institute of Management Technology, Nagpur during February 13-14, 2009.
2. **Achieve** V<sup>th</sup> position in inter-colleges examination of C.C.S. University in M.Sc. Mathematics in 2006.
3. Qualified **NET-JRF** examination June 2006 conducted by **UGC-CSIR**.
4. Got the Junior Research Fellowship from Council of Scientific and Industrial Research for pursuing Ph.D. from 01.07.2007 to 31.03.2009.

#### Association With Professional Bodies

1. Life time member of the Association for Advancement in Combinatorial Sciences.
2. Vice-President of the Association for Advancement in Combinatorial Sciences.
3. Life time member of Operational Research Society of India.
4. Vice-President of the Meerut Chapter of Operational Research Society of India.

#### Other Activities

1. Participated as an expert in a meeting to rechecking the technical words in Mathematics for the updation of Glossary of Mathematics in Commission for Scientific and Technical Terminology.
2. Worked as a member of Team of Observers for the University of Delhi Examinations.
3. Worked as an Observer in UGC-NET Examination December 2012 conducted by UGC.

#### Refresher Course

- ❖ Refresher Course in Mathematics and Statistics (RC-238) from 18-7-2011 to 6-8-2011 held at Academic Staff College, H. P. University, Shimla with “A” grade.
- ❖ Refresher Course (SRC) Mathematics/Operational Research/Statistics and Computer Science organized by **CPDHE** University of Delhi From May 31,2019 to June 14,2019.

#### Orientation Programme

- ❖ Orientation Programme (OP-75/76) organized by Centre for Professional Development in Higher Education, University of Delhi from Oct. 5-15, Nov.9-19, 2013& Dec. 14-20, 2013.

### **Faculty Development Programme**

- ❖ FDP on Managing Online Classes and Co-Creating Moocs, Organized by Teaching Learning Centre, Ramanujan College, University of Delhi from April 20 – May 06, 2020.
- ❖ FDP on Recent Trends in Research Methodology, E-content, Mathematical and Statistical Methods in Open Education World, organized by Kalindi College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre, Dec 17 - 23, 2019.
- ❖ One week National workshop on Advanced Numerical Techniques and Its Applications, Organized by Department of Mathematics Graphic Era Hill University, Dehradun from May 06-11, 2019.

(Dr. Chaman Singh)  
Signature of Faculty Member