

CURRICULAM VITAE



Name : **Dr. Rakesh Gupta**
Fathers' Name : **Sh. R. K. Gupta**
Date of Birth : Dec. 29, 1959
Designation : **Professor & Head**
Office Address : Dept. of Statistics
Ch. Charan Singh University
Meerut
Residential Address : H-1, Professors' flat,
Ch. Charan Singh University Campus
Meerut – 250004
Ph. (0121) 2765969
Mobile – 9412630572
E-mail- prgheadstats@yahoo.in

Academic Qualifications :

Exam	Subjects	Year	Division	University	Remark
B. Sc.	Chem., Maths & Statistics	1978	I st	Meerut Univ.	
M. Sc.	Statistics	1980	I st	Meerut Univ.	I st Position in the University
M. Phil.	Statistics	1982	I st	Meerut Univ.	I st Position in the University
Ph. D.	Statistics	1984	-	Meerut Univ.	Awarded J.R.F. and S.R.F. of C.S.I.R.

Fellowships Awarded :

Designation	Duration	Name of the Institution
J.R.F. (C.S.I.R.)	31.01.81 – 31.01.83	Meerut University, Meerut
S.R.F. (C.S.I.R.)	01.02.83 – 28.02.85	Meerut University, Meerut
R.A. (C.S.I.R.)	01.03.85 – 24.09.85	Dept. of O.R., Univ. of Delhi

Teaching Experience : 31 Years

Designation	Duration	University	Course Taught
Lecturer	25.9.85-29.12.91	Ch. Charan Singh University, Meerut	M. Sc. - Matrix Theory, Probability Theory, Engineering Statistics, Multivariate Analysis, Laplace Transform, Operations Research, Statistical Distributions
Reader	30.12.91-29.12.99		
Professor	30.12.99 to date		M. Phil.- Reliability Theory and Distribution Theory

Research Experience : 31 Years

RESEARCH GUIDANCE/PUBLICATION

- (i) Guided sixty six (66) M. Phil. dissertations in Statistics.
- (ii) Supervised twenty six (26) students for completing their Ph. D. degrees. (See Annexure-A)
- (iii) One hundred sixty (167) Research papers have been published in various national and international journals, like – Microelectronics and Reliability (U.K.), Int. J. of Systems Science (U.K.), IEEE Trans. Reliability (USA), Reliability Engineering and System Safety (USA), J. of Quality in Maintenance Engineering (Saudi Arabia), Int. J. of Management and Systems (Delhi), J. of Ravishankar University (Raipur), Int. J. of Productivity Quality and Reliability (Kolkata), Aligarh J. of Statistics (A.M.U.), Gujarat Statistical Review (Ahmadabad), J. of Combinatorics Information & System Sciences (Delhi), Int. J. of Agricult. Stat. Sciences, Pure and Applied Mathematika Sciences, J. of Rajasthan Academy of Physical Sciences, Int. J. of System Assurance Engineering and Management (Springer), Int. J. of Scientific and Engineering Research (France), Int. J. of Scientific and Research Publications, Int. J. of Research and Review in Applied Sciences (Pakistan), J. of Mathematical and Computational Science (London), J. of Informatics and Mathematical Sciences, J. of Reliability and Statistical Studies (Pant Nager), J. of Statistics & Management Systems, Int. J. of Statistics and Systems and Int. J. of Tran. In Mathematical Sciences and Computer. (See Annexure-B)
- (iv) Contributed a 50 pages chapter titled “Analysis of Stochastic Models in Manufacturing Systems Pertaining to Repair Machine Failure” to the book entitled “Optimization Methods for Manufacturing” edited by Prof. Cornelius T. Leondes, University of California, Los Angeles and published by **CRC press, Washington** in the year 2001.

SEMINARS / CONFERENCES ATTENDED

- (i) Attended II International Symposium on Optimization and Statistics held at A.M.U., Aligarh during Nov. 2-4, 1993.
- (ii) Attended a National Seminar on Operation Research and Management Decision Making held at Delhi University, Delhi during Nov. 19-20, 1993.
- (iii) Presented a paper in the First Annual Conference of Indian Society of Information Theory and Applications held at Rohtak in the Dept. of Statistics, M.D. University during Feb. 3-5, 1996.
- (iv) Presented a paper in the IV International Symposium on Optimization and Statistics and Annual Conference of Indian Society of Information Theory and Applications held at Aligarh in the Dept. of Statistics, A.M.U. during Dec. 8-10, 1998.
- (v) Presented a paper in the Silver Jubilee Symposium on Modeling, Optimization and Information Technology in Managerial Decision Making held at Bundelkhand University, Jhansi during Jan. 14-16, 2000.
- (vi) Delivered a talk on “Some Aids to Reliability Studies” in a workshop held in March 2000 in the Dept. of Statistics, C. C. S. University, Meerut.
- (vii) Presented a paper in the XX Annual Conference of Indian Society for Probability and Statistics held in the Dept. of Statistics, Pt. Ravishankar Shukla University, Raipur (M.P.) during Feb. 19-21, 2001.
- (viii) Presented a paper in the Vth International Symposium on Optimization and Statistics held in the Dept. of Statistics, A.M.U., Aligarh during Dec. 28-30, 2002.
- (ix) Presented a paper in International Conference on Life Testing, Reliability, Sampling Theory and Quality Control held in the Dept. of Statistics, B.H.U., Varanasi during Dec. 29-31, 2003.
- (x) Presented a paper and chaired a session in National Conference on Emerging Trends in Statistical Methods and Optimization Techniques held in Department of Statistics, University of Jammu, Jammu during Feb. 22-23, 2008.
- (xi) Presented a paper in International Conference on Development and Applications of Statistics in Emerging Areas of Science and Technology held in Department of Statistics, University of Jammu, Jammu during Dec. 8-10, 2010.
- (xii) Presented a paper in National Conference on Statistics for Twenty-first Century held in Department of Statistics, University of Kerala, Trivandrum during March 17-19, 2011.

- (xiii) Delivered a talk and chaired a session in VII International Symposium on Optimization and Statistics held in Department of Statistics and Operations Research, A.M.U., Aligarh during Dec. 21-23, 2012.
- (xiv) Delivered an invited talk in a national seminar on “Optimization Techniques” organized by Department of Statistics D.A.V. PG College, Muzaffarnagar during March 19-20, 2013.
- (xv) Presented a paper and chaired a session in IV National Conference on Statistical Inference, Sampling Techniques and related Areas held in Department of Statistics and Operations Research, A.M.U., Aligarh during Feb. 18-19, 2014.
- (xvi) Delivered an invited talk and Chaired a session in a national conference on “Recent Advances in Statistical and Mathematical Sciences and their Applications” organized by Department of Statistics Kumaun University, S.S.J. Campus, Almora during Oct,04-06,2014.
- (xvii) Delivered an invited talk in a national conference on “Recent Trends and Developments in Statistics (NCRTDS)” organized by Department of Statistics M.D. University, Rohtak during Feb,21-23,2015.

RESEARCH PROJECTS COMPLETED

S. No.	Topic	Agency	Period	Amount (in Rs.)
(i)	Estimation of parameters in Stochastic Models	U.G.C.	11.10.90-10.10.91 (Two years)	17,000.00
(ii)	Cost Benefit Analysis of Estimation of Parameters	U.G.C.	28.03.95-27.03.98 (Three years)	1,39,092.00 + one J.R.F.
(iii)	Configurational Study and Analysis Stochastic Models	U.G.C.	26.03.99-25.03.01 (Two years)	15,000.00
(iv)	Some Reliability Aids to Engineering System Models	U.G.C.	03.09.01-02.09.03 (Two years)	20,000.00

DETAILS OF OTHER ACADEMIC / ADMINISTRATIVE ASSIGNMENTS

- (i) Worked as a Referee of various national and international journals such as–Microelectronics and Reliability (U.K.), Reliability Engineering and System Safety (USA), Journal of Quality in Maintenance Engineering (Saudi Arabia), Journal of Ravishankar University (Raipur), Gujarat Statistical Review (Ahmadabad), Aligarh Journal of Statistics (Aligarh), IMA Journal of Applied Mathematics (U.K.), International Journal of System Assurance Engineering and Management, Journal of Reliability and Statistical Studies and International Journal of Systems Science (U.K.).

- (ii) Evaluated a number of M.Phil. / Ph.D. Thesis of various Universities and worked as a Paper-Setter of Public Service Commission – U.P., M.P. and Various state Universities.
- (iii) Acting as a member of Board of Studies in H.N.B. Garhwal University, Srinagar since last ten years.
- (iv) Worked as Assistant D.S.W., Ch. Charan Singh University, Meerut during the period 1993-1995.
- (v) Worked as a Warden of K.P. Boys Hostel, Ch. Charan Singh University, Meerut during the period Dec.15, 1998 to Sept.20, 2001.
- (vi) Worked as a member of Advisory Board of the School of Business Studies, Ch. Charan Singh University, Meerut during the session 1999-2000.
- (vii) Worked as Chief Election Officer for conducting University Campus Students' Union Elections 2004-2005.
- (viii) Acted as coordinator of National Mathematical Olympiad of Meerut region during 2003-07.
- (ix) Worked as Coordinator of UGC NET Exam-Dec. 2008.
- (x) Worked as Dean of Science, CCS University, Meerut.
- (xi) Worked as senior superintendent CCS University Campus semester examinations in Dec-Jan, 2011.
- (xii) Worked as Head department of Statistics from Jan. 01, 2008 to Dec. 31, 2010.
- (xiii) Member of IQAC, C.C.S.University, Meerut from 2010.

LIST OF STUDENTS WHO HAVE COMPLETED THEIR PH.D

Annexure-A

1. **Mr. Sachendra Bansal**, “Cost benefit Analysis of Some Reparable Redundant Systems”, Awarded (1990).
2. **Mrs. Alka Chaudhary**, “Some Stochastic Models Related to Engineering Systems”, Awarded (1993).
3. **Mr. S. Z. Mumtaz**, “Model Building and Analysis of Some Redundant Systems”, Awarded (1994).

4. **Mrs. Ritu Goel**, “Cost-Benefit Analysis of Some Probabilistic Models Related to Engineering Systems”, Awarded (1999).
5. **Mr. Nitin Rastogi**, “Some Aids to Reliability Studies”, Awarded (2000).
6. **Mr. Ram Kishan**, “Stochastic Analysis of Some Repairable Redundant Systems”, Awarded (2001).
7. **Mr. A. K. Mogha**, “Cost-Benefit Analysis of Some Stochastic Models of Redundant Systems”, Awarded (2002).
8. **Mr. V. K. Sehgal**, “Counter-Model Theory and its Applications in Population Studies Competing Risks and Epidemic Models”, Awarded (2003).
9. **Mr. Shivakar**, “Some Reliability Aids to Engineering System Models”, Awarded (2003).
10. **Mr. Praween Kumar**, “Cost-Benefit Analysis of Some Probabilistic Models Related to Engineering Systems”, Awarded (2003).
11. **Mr. P. D. Agarwal**, “Stochastic Analysis of Some Redundant System models”, Awarded (2003).
12. **Mr. Pawan Kumar**, “Some Stochastic Repairable Engineering System Models”, Awarded (2003).
13. **Mr. Pradeep Chaudhary**, “Cost-Benefit Analysis of Various Repairable Stochastic Models”, Awarded (2004).
14. **Mr. A. K. Gupta**, “Analysis of Some Non-Markovian Stochastic Models of Redundant Systems”, Awarded (2004).
15. **Mr. Rahul Singh**, “Profit Analysis of Some Repairable Engineering System Models”, Awarded (2005).
16. **Mr. Satish Kumar**, “Cost Benefit Analysis of Non-Markovian Models of Some Redundant Systems”, Awarded (2006).
17. **Km. Madhu Mahi**, “Analysis of Some Repairable Redundant System Models”, Awarded (2006).
18. **Mr. Gaurav Varshney**, “Configurational Modeling and Analysis in Respect of Reliability Characteristics of Some Redundant System Models”, Awarded (2006).
19. **Mr. Pradeep Sharma**, “Configurational Study and Analysis in Respect of Reliability Characteristics of Some Stochastic System Models”, Awarded (2006).
20. **Miss. Punam Bisht**, “Stochastic Analysis of Some Probabilistic Models Related to Engineering Systems”, (2008).

21. **Mr. Vishal Sharma**, “Analysis of Some Engineering System Models by Regenerative Point Technique”, (2008).
22. **Km. Reshu Agarwal**, “Dynamic Statistical Modeling of Methane Emission from Wetlands Using Satellite Remote Sensing Data”, (2008).
23. **Mr. Kailash Kumar**, “Profit Analysis of Some Engineering System Models”, (2008).
24. **Mr. Dharmendra Kumar**, “Stochastic Analysis of Some Redundant System Models”, (2009).
25. **Km. Archana Tomar**, “Stochastic Analysis of Some Repairable Engineering System Models”, (2009).
26. **Mr. Vikas Saxena**, “Configurational Study and Cost-Benefit Analysis of Some Repairable Engineering System Models”, (2011).

LIST OF RESEARCH PAPERS

Annexure-B

1. L.R. Goel, N.K. Jaiswal & **Rakesh Gupta**, “A Multistate System with Two Repair Distributions”, Microelectron Reliab., Vol. 23, No. 2, pp. 337-340 (1983).
2. L.R. Goel and **Rakesh Gupta**, “A Multi-Component Two Unit Cold Standby System with Three Modes”, Microelectron Reliab., Vol. 23, No. 5, pp. 799-803 (1983).
3. L.R. Goel and **Rakesh Gupta**, “A Multi-Standby System with Repair and Replacement Policy”, Microelectron Reliab., Vol. 23, No. 5, pp. 805-808 (1983).
4. L.R. Goel and **Rakesh Gupta**, “A Multi-Standby Multi Failure Mode System with Repair and Replacement Policy”, Microelectron Reliab., Vol. 23, No. 5, pp. 809-812 (1983).
5. L.R. Goel, **Rakesh Gupta** and Praveen Gupta, “A Single Unit Multi-Component System Subject to Various Types of Failures”, Microelectron Reliab., Vol. 23, No. 5, pp. 813-816 (1983).
6. L.R. Goel, **Rakesh Gupta** and Praveen Gupta, “Analysis of a Two Unit Hot Standby System with Three Modes”, Microelectron Reliab., Vol. 23, No. 6, pp. 1029-1033 (1983).
7. L.R. Goel, **Rakesh Gupta** and S.K. Singh, “Analysis of a Two Unit Cold Standby System with Three Modes”, Microelectron Reliab., Vol. 23, No. 6, pp. 1041-1044 (1983).
8. L.R. Goel and **Rakesh Gupta**, “Reliability Analysis of a Multi-Unit Cold Standby System with Two Operating Modes”, Microelectron Reliab., Vol. 23, No. 6, pp. 1045-1050 (1983).

9. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "A Two (Multi-Component) Unit Parallel System with Standby and Common Cause Failure", *Microelectron Reliab.*, Vol. 24, No. 3, pp. 415-418 (1984).
10. L.R. Goel and **Rakesh Gupta**, "Availability Analysis of a Two Unit Cold Standby System with Two Switching Failure Modes", *Microelectron Reliab.*, Vol. 24, No. 3, pp. 419-423 (1984).
11. L.R. Goel and **Rakesh Gupta**, "Analysis of a Two Unit Standby System with Three Modes and Imperfect Switching Device", *Microelectron Reliab.*, Vol. 24, No. 3, pp. 425-429 (1984).
12. L.R. Goel, N.K. Jaiswal and **Rakesh Gupta**, "Availability Analysis of a Four-State Markov System", *International Journal of Systems Science*, Vol. 25, No. 9, pp. 977-982 (1984).
13. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Cost Analysis of a Two-Unit Priority Standby System with Imperfect Switch and Arbitrary Distributions", *Microelectron Reliab.*, Vol. 25, No. 1, pp. 65-69 (1985).
14. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Cost Analysis of a Two-Unit Cold Standby System with Two Types of Operation and Repair", *Microelectron Reliab.*, Vol. 25, No. 1, pp. 71-75 (1985).
15. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Availability Analysis of a Two-Unit (Dissimilar) Parallel System with Inspection and Bivariate Exponential Life Times", *Microelectron. Reliab.*, Vol. 25, No. 1, pp. 77-80 (1985).
16. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Cost Analysis of a Two-Unit Standby System with Delayed Replacement and Better Utilization of Units", *Microelectron Reliab.*, Vol. 25, No. 1, pp. 81-86 (1985).
17. L.R. Goel, **Rakesh Gupta** and A.K. Rastogi, "Cost Analysis of a System with Partial Failure Mode and Abnormal Weather Conditions", *Microelectron Reliab.*, Vol. 25, No. 3, pp. 461-466 (1985).
18. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Profit Analysis of a Cold Standby System with Two Repair Distributions", *Microelectron Reliab.*, Vol. 25, No. 3, pp. 467-472 (1985).
19. L.R. Goel, G.C. Sharma and **Rakesh Gupta**, "Cost Analysis of a Two Unit Cold Standby System Under Different Weather Condition", *Microelectron Reliab.*, Vol. 25, No. 4, pp. 655-659 (1985).
20. **Rakesh Gupta**, "Cost-Benefit Analysis of a One-Server Two-Unit Standby System Subject to Imperfect Switching Device, Random Inspection and k-Failure Modes", *Microelectron Reliab.*, Vol. 26, No. 1, pp. 7-11 (1986).
21. **Rakesh Gupta**, "Probabilistic Analysis of a Two-Unit Cold Standby System with Two-Phase Repair and Preventive Maintenance", *Microelectron Reliab.*, Vol. 26, No. 1, pp. 13-18 (1986).

22. L.R. Goel, S.K. Singh and **Rakesh Gupta**, "Stochastic Analysis of Standby System with Duplex Units", *Microelectron Reliab.*, Vol. 26, No. 1, pp. 19-24 (1986).
23. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Cost-benefit analysis of a two-unit warm standby system with inspection, repair and post-repair" *IEEE Transaction on Reliability*, Vol. R-35, No. 1, pp. 70 (1986).
24. **Rakesh Gupta**, C.P. Bajaj and S.K. Singh, "Cost-benefit analysis of a single server three unit redundant system with inspection, delayed replacement and two types of repair" *Microelectron Reliab.*, Vol. 26, No. 2, pp. 247-253 (1986).
25. L.R. Goel, **Rakesh Gupta** and A.K. Rastogi, "Profit analysis of a two-unit standby system with two types of repair and preventive maintenance" *Microelectron Reliab.*, Vol. 26, No. 3, pp. 435-444 (1986).
26. **Rakesh Gupta**, C.P. Bajaj and S.M. Sinha, "A single server multi-component two-unit cold standby system with inspection and imperfect switching device" *Microelectron Reliab.*, Vol. 26, No. 5, pp. 873-877 (1986).
27. **Rakesh Gupta**, C.P. Bajaj and S.M. Sinha, "Cost-benefit analysis of a multi-component standby system with inspection and slow switch" *Microelectron Reliab.*, Vol. 26, No. 5, pp. 879-882 (1986).
28. L.R. Goel, **Rakesh Gupta** and S.K. Singh, "Cost analysis of a two unit priority standby system with imperfect switch, intermittent repair and arbitrary distributions", *IEEE Transaction on Reliability*, Vol. R-35, No. 5, pp. 585 (1986).
29. L.R. Goel, S.K. Singh and **Rakesh Gupta**, "Analysis of a single server three-unit redundant system with inspection and delayed replacement", *IEEE Transaction on Reliability*, Vol. R-35, No. 5, pp. 606 (1986).
30. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Stochastic behavior of a cell-exposed to radiations", *Int. Journal of Management and Systems*, Vol. 4, No. 1, pp. 15-26 (1988).
31. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Stochastic behavior of a cell survival with n-sensitive regions of nucleus and cytoplasm", *Int. Journal of Management and Systems*, Vol. 5, No. 2, pp. 89-98 (1988).
32. L.R. Goel, **Rakesh Gupta** and R.K. Agnihotry, "Analysis of a three-unit redundant system with two types of repair and inspection " *Microelectron Reliab.*, Vol. 29, No. 5, pp. 769-773 (1989).
33. **Rakesh Gupta** and L.R. Goel, "Profit analysis of a two-unit priority standby system with administrative delay in repair", *Int. Journal of Systems Science*, Vol. 20, No. 9, pp. 1703-1712 (1989).

34. L.R. Goel, R.K. Agnihotry and **Rakesh Gupta**, “Stochastic analysis of a two-unit warm standby system with fault detection and inspection”, *Microelectron Reliab.*, Vol. 30, No. 1, pp. 61-65 (1990).
35. L.R. Goel, **Rakesh Gupta** and S.E. Moafi B., “Operating orbit system with two dissimilar units and corresponding standby”, *Int. J. of Systems Science*, Vol. 21, No. 3, pp. 495-501 (1989).
36. **Rakesh Gupta**, Sachendra Bansal and L.R. Goel, “Profit analysis of a two-unit priority standby system with rest period of the operator”, *Microelectron Reliab.*, Vol. 30, No. 4, pp. 649-654 (1990).
37. L.R. Goel, **Rakesh Gupta** and Preeti Srivastava, “Profit analysis of a two-unit cold standby system with varying physical conditions of the repairman”, *Microelectron Reliab.*, Vol. 30, No. 4, pp. 655-660 (1990).
38. L.R. Goel, **Rakesh Gupta** and S.E. Moafi B., “Stochastic analysis of a multi-unit cold standby system working in orbit form”, *Microelectron Reliab.*, Vol. 30, No. 5, pp. 845-850 (1990).
39. **Rakesh Gupta**, Sachendra Bansal and L.R. Goel, “Reliability analysis of a system with a mixture of warm and cold standby”, *Microelectron Reliab.*, Vol. 30, No. 6, pp. 1039-1042 (1990).
40. **Rakesh Gupta** and Rakesh Goel, “Cost-benefit analysis of two-unit parallel system with administrative delay in repair”, *Int. J. of Systems Science*, Vol. 21, No. 7, pp. 1369-1379 (1990).
41. **Rakesh Gupta**, Sachendra Bansal and L.R. Goel, “Cost-benefit analysis of a two-unit cold standby system with the provision of rest to a unit”, *Int. J. of Systems Science*, Vol. 21, No. 8, pp. 1451-1462 (1990).
42. **Rakesh Gupta**, Sachendra Bansal and L.R. Goel, “Profit function analysis of a system with mixture of warm and cold standby”, *Int. J. of Systems Science*, Vol. 21, No. 8, pp. 1577-1587 (1990).
43. **Rakesh Gupta** and Rakesh Goel, “Profit analysis of a two-unit cold standby system with abnormal weather conditions”, *Microelectron Reliab.*, Vol. 31, No. 1, pp. 1-5 (1991).
44. **Rakesh Gupta**, Rakesh Goel and L.R. Goel, “Profit analysis of a two multi-component unit standby system with MRT”, *Microelectron Reliab.*, Vol. 31, No. 1, pp. 7-10 (1991).
45. L.R. Goel, R.K. Agnihotri and **Rakesh Gupta**, “Two unit redundant system with inspection and adjustable rates”, *Microelectron Reliab.*, Vol. 31, No. 1, pp. 11-14 (1991).
46. **Rakesh Gupta** and Sachendra Bansal, “Profit analysis of a two-unit priority standby system subject to degradation”, *Int. J. of Systems Science*, Vol. 22, No. 1, pp. 61-72 (1991).

47. L.R. Goel, **Rakesh Gupta** and P.K. Tyagi, "C.H.E. failure in a two-unit standby system with slow switch, repair and post repair", *Microelectron Reliab.*, Vol. 31, No. 2-3, pp. 219 (1991).
48. **Rakesh Gupta** and Sachendra Bansal, "Cost analysis of a three-unit standby system subject to random shocks and linearly increasing failure rates", *Reliability Engineering and System Safety*, Vol. 33, pp. 249-263 (1991).
49. **Rakesh Gupta** and Sachendra Bansal, "Analysis of a complex system composed of two sub-systems with their standby", *Microelectron Reliab.*, Vol. 31, No. 2/3, pp. 453-463 (1990).
50. L.R. Goel, R.K. Agnihotri and **Rakesh Gupta**, "A single server two-unit warm standby system with n failure modes, fault detection and inspection", *Microelectron Reliab.*, Vol. 31, No. 5, pp. 841-845 (1991).
51. S.E. Moafi B., L.R. Goel and **Rakesh Gupta**, "Comparison of two stochastic models each related to two unit series system with cold standbys", *Microelectron Reliab.*, Vol. 31, No. 6, pp. 1105-1111 (1991).
52. L.R. Goel, V.S. Rana and **Rakesh Gupta**, "Stochastic analysis of a computer system model with intelligent terminals and two types of failures", *Microelectron Reliab.*, Vol. 31, No. 6, pp. 1113-1117 (1991).
53. **Rakesh Gupta**, "Analysis of a two-unit cold standby system with degradation and linearly increasing failure rates", *Int. Journal of Systems Science*, Vol. 22, No. 11, pp. 2329-2338 (1991).
54. **Rakesh Gupta** and Sachendra Bansal, "Cost-benefit analysis of one-unit system with n-degraded states due to random shocks", *Int. Journal of Systems Science*, Vol. 22, No. 11, pp. 2339-2346 (1991).
55. **Rakesh Gupta** and L.R. Goel, "Profit analysis of a k-out of n-trichotomous system", *Reliability Engineering and System Safety*, Vol. 37, pp. 39-44 (1992).
56. L.R. Goel, R.K. Agnihotri and **Rakesh Gupta**, "Profit evaluation of a two-unit cold standby system with random change in units", *Int. Journal of Systems Science*, Vol. 23, No. 3, pp. 367-377 (1992).
57. L.R. Goel, Preeti Shrivastava and **Rakesh Gupta**, "A two-unit cold standby system with correlated failures and repairs", *Int. Journal of Systems Science*, Vol. 23, No. 3, pp. 379-391 (1992).
58. L.R. Goel, P.K. Tyagi and **Rakesh Gupta**, "Cost analysis of a two-unit chargeable standby system interchangeable units and two type of failures", *Microelectron Reliab.*, Vol. 32, No. 6, pp. 775-779 (1992).
59. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Stochastic analysis of a Xenix operating computer system with two down modes", *Microelectron Reliab.*, Vol. 32, No. 6, pp. 781-791 (1992).

60. L.R. Goel, **Rakesh Gupta** and S.E. Moafi B., "A stochastic model of a system with two phases of operation", *Microelectron Reliab.*, Vol. 32, No. 6, pp. 799-803 (1992).
61. **Rakesh Gupta** and Alka Chaudhary, "A two unit priority standby system subject to random shocks and Rayleigh failure time distribution", *Microelectron Reliab.*, Vol. 32, No. 12, pp. 1713-1723 (1992).
62. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Reliability analysis of a satellite based computer communication network system", *Microelectron Reliab.*, Vol. 33, No. 2, pp. 119-126 (1993).
63. **Rakesh Gupta** and Alka Chaudhary, "A multi-component standby system subject to inspection and truncated normal failure time distribution", *Microelectron Reliab.*, Vol. 33, No. 2, pp. 127-131 (1993).
64. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Stochastic analysis of a fault tolerant network system", *Microelectron Reliab.*, Vol. 33, No. 3, pp. 303-306 (1993).
65. S.E. Moafi B., L.R. Goel and **Rakesh Gupta**, "Comparison of two stochastic alternative phase models", *Microelectron Reliab.*, Vol. 33, No. 4, pp. 501-507 (1993).
66. **Rakesh Gupta** and Alka Chaudhary, "Analysis of a standby system with Rayleigh down time and gamma failure time distributions", *Microelectron Reliab.*, Vol. 33, No. 6, pp. 793-796 (1993).
67. **Rakesh Gupta**, Alka Chaudhary and Ritu Goel, "Profit analysis of a two-unit standby system subject to degradation and random shocks", *Microelectron Reliab.*, Vol. 33, No. 6, pp. 1073-1079 (1993).
68. L.R. Goel, **Rakesh Gupta** and V.S. Rana, "Analysis of a multi-unit solar energy system model", *Microelectron Reliab.*, Vol. 33, No. 10, pp. 1461-1465 (1993).
69. **Rakesh Gupta** and Alka Chaudhary, "A two unit system subject to the partial failure mode and gamma repair time distribution", *Microelectron Reliab.*, Vol. 33, No. 15, pp. 2277-2280 (1993).
70. L.R. Goel, **Rakesh Gupta** and P.K. Tyagi, "Cost-profit analysis of a complex system with correlated failure and repairs", *Microelectron Reliab.*, Vol. 33, No. 15, pp. 2281-2284 (1993).
71. **Rakesh Gupta**, Ritu Goel and Alka Chaudhary, "Analysis of a two unit standby with fixed allowed down time and truncated exponential life time distributions", *Reliability Engineering and System Safety*, Vol. 44, pp. 119-124 (1994).
72. **Rakesh Gupta** and Alka Chaudhary, "Analysis of reliability bounds for series, parallel and K-out of n system configuration", *Microelectron Reliab.*, Vol. 34, No. 1, pp. 183-185 (1994).

73. L.R. Goel, P.K. Tyagi and **Rakesh Gupta**, "Analysis of a standby system with dependent repair time and slow switching device", *Microelectron Reliab.*, Vol. 34, No. 2, pp. 383-386 (1994).
74. **Rakesh Gupta** and Ritu Goel, "The truncated normal life time model", *Microelectron Reliab.*, Vol. 34, No. 5, pp. 935-937 (1994).
75. **Rakesh Gupta** and Alka Chaudhary, "Profit analysis of a two unit man-machine system with random appearance and disappearance of the operator", *Microelectron Reliab.*, Vol.-34, No. 6, pp. 1133-1136 (1994).
76. **Rakesh Gupta** and Alka Chaudhary, "A two unit system with allowed down time and random check of standby", *Microelectron Reliab.*, Vol. 34, No. 8, pp. 1381-1385 (1994).
77. **Rakesh Gupta** and Alka Chaudhary, "Profit analysis of a system with two unit having guarantee period and delayed operation of standby", *Microelectron Reliab.*, Vol. 34, No. 8, pp. 1387-1390(1994).
78. **Rakesh Gupta**, Alka Chaudhary and Ritu Goel, "Cost-benefit analysis of a two unit standby system with provision of repair machine failure", *Microelectron Reliab.*, Vol. 34, No. 8, pp. 1391-1394 (1994).
79. **Rakesh Gupta** and S.Z. Mumtaz, "A cold standby system with repair and replacement policies and correlated failure and repair-times", *Journal of Quality in Maintenance Engineering*, Vol. 4, pp. 56-66 (1995).
80. **Rakesh Gupta** and Alka Chaudhary, "Analysis of reliability bounds for two- unit parallel and standby reparable systems", *Microelectron Reliab.*, Vol. 35, No. 1, pp. 113-115 (1995).
81. L.R. Goel, P.K. Tyagi and **Rakesh Gupta**, "A cold standby system with arrival time of server and correlated failures and repairs", *Microelectron Reliab.*, Vol. 35, No. 4, pp. 739-742 (1995).
82. L.R. Goel, **Rakesh Gupta** and P.K. Tyagi, "Analysis of a two-unit standby system with preparation time and correlated failure and repairs", *Microelectron Reliab.*, Vol. 35, No. 8, pp. 1163-1165 (1995).
83. **Rakesh Gupta** and Alka Chaudhary, "Stochastic analysis of a priority unit standby system with repair machine failure", *Int. J. of Systems Science*, Vol. 26, No. 12, pp. 2435-2440 (1995).
84. **Rakesh Gupta** and Ram Kishan, "Cost-benefit analysis of a complex system with correlated failures and repairs" *J. of Quality in Maintenance Engineering*, Vol. 2, No. 2, pp. 50-59 (1996).

85. **Rakesh Gupta** and S.Z. Mumtaz, “Stochastic analysis of a two-unit cold standby system with maximum repair time and correlated failures and repairs” J. of Quality in Maintenance Engineering, Vol. 2, No. 3, pp. 66-76 (1996).
86. **Rakesh Gupta**, P.K. Tyagi and Ram Kishan, “A two-unit System with correlated failures and repairs and random appearance and disappearance of repairman” Int. J. of Systems Science, Vol. 27, No. 6, pp. 561-566 (1996).
87. L.R. Goel, S.Z. Mumtaz and **Rakesh Gupta**, “A two-unit duplicating standby system with correlated failure and repair / replacement times”, Microelectron Reliab., Vol. 36, No. 4, pp. 517-523 (1996).
88. **Rakesh Gupta** and Alka Chaudhary, “Cost-benefit analysis of a multi-unit parallel trichotomous system with random shocks”, Microelectron Reliab., Vol. 36, No. 5, pp. 701-706 (1996).
89. **Rakesh Gupta**, Vikas Tyagi and P.K. Tyagi, “Cost-benefit analysis of a two-unit standby system with post repair activation time and correlated failures and repairs”, J. of Quality in Maintenance Engineering, Vol. 3, No. 1, pp. 55-63 (1997).
90. **Rakesh Gupta**, S.Z. Mumtaz and Ritu Goel, “A two dissimilar unit multi-component system with correlated failures and repairs”, Microelectron Reliab., Vol. 37, No. 5, pp. 845-849 (1997).
91. **Rakesh Gupta**, Ram Kishan and Ritu Goel, “Analysis of a system having super-priority, priority and ordinary units with arbitrary distributions”, Microelectron Reliab., Vol. 37, No. 5, pp. 851-856 (1997).
92. **Rakesh Gupta** and Ram Kishan, “Stochastic analysis of a system model pertaining to electric power, inverter and generator”, Bulletin of Pure and Applied Sciences, Vol. 17E, No. 1, pp. 95-102 (1998).
93. **Rakesh Gupta**, S.Z. Mumtaz and Nitin Rastogi, “Profit analysis of a system with mutual changeover of units and correlated failures and repairs”, J. of Quality in Maintenance Engineering, Vol. 5, No. 2, pp. 128-140 (1999).
94. **Rakesh Gupta**, Ram Kishan and Pawan Kumar, “A two-non-identical –unit parallel system with correlated lifetimes”, Int. J. of Systems Science, Vol. 30, No. 10, pp. 1123-1129 (1999).
95. **Rakesh Gupta** and Ram Kishan, “On profit comparison of two stochastic models each pertaining to two unit standby system with fixed preparation time and hyper-exponential repair time distribution”, Int. J. of Systems Science, Vol. 30, No. 12, pp. 1309-1317 (1999).
96. **Rakesh Gupta** and A.K. Mogha, “Stochastic analysis of series, parallel and standby system models with Geometric lifetime Distributions”, J. of Ravi-Shankar University, Vol. 13, No. B (Science), pp. 68-80 (2000).

97. **Rakesh Gupta** and Pawan Kumar, “A two non-identical priority unit system model with the effect of external causes and correlated failure and repair times”, J. of Ravi-Shankar University, Vol. 14, No. B (Science), pp. 85-98 (2001).
98. **Rakesh Gupta** and Pawan Kumar, “Analysis of two-unit series subsystems with one standby system model”, Gujarat Statistical Review, Vol. 29, No. 1-2, pp. 87-100 (2002).
99. A.K. Mogha, **Rakesh Gupta** and A.K. Gupta, “A two-unit parallel system with correlated lifetimes and repair machine failure”, IAPQR, Vol. 28, No. 1, pp. 1-22 (2003).
100. **Rakesh Gupta** and Shivakar, “A two non-identical unit parallel system with waiting time distribution of repairman”, Int. J. of Management & Systems, Vol. 19, No. 1, pp. 77-90 (2003).
101. **Rakesh Gupta**, Pawan Kumar and Shivakar, “A two unit parallel system with repair machine failure and correlated failure and repair times”, Gujarat Statistical Review, Vol. 30, No. 1-2, pp.19-34 (2003).
102. **Rakesh Gupta** and Shivakar, “Analysis of a stochastic model of cloth weaving system”, IAPQR, Vol. 28, No. 1, pp. 83-99 (2003).
103. **Rakesh Gupta**, Pradeep Chaudhary and Gaurav Varshney, “A two non identical correlated failure and repair times”, J. of Combinatorics, Information & System Sciences, Vol. 28-29, No. 1-4, pp. 87-98 (2003-04).
104. **Rakesh Gupta**, A.K. Mogha and A.K. Gupta, “A two unit active redundant system with two phase repair and correlated life times”, Aligarh J. of Statistics, Vol. 24, pp. 63-79 (2004).
105. **Rakesh Gupta** and Gaurav Varshney, “Reliability analysis of a gas leakage detection system in an industrial workshop with the application of Boolean function technique”, Aligarh J. of Statistics, Vol. 24. pp. 107-119 (2004).
106. **Satish Gupta** and Rakesh Gupta, “Cost benefit analysis of two dissimilar unit parallel system with administrative delay in repair”, Proceeding of national seminar on mathematics and computer science held at S.D.(P.G.) College, Muzaffarnagar during Nov. 29-30, 2005.
107. **Rakesh Gupta**, Vishal Sharma and Gaurav Varshney, “Reliability analysis of an emergency shutdown system model in an industrial plant”, RdE J. of Mathematical Sciences, Vol.1, pp.71-82(2006) .
108. **Rakesh Gupta**, Vishal Sharma and Nitin Rastogi, “Cost benefit analysis of a three unit redundant system with correlated failure and repair times”, Int. J. Agricultural Statistical Sciences, Vol. 2, No. 1, pp. 71-82 (2006).
109. **Rakesh Gupta**, Pawan Kumar and Vishal Sharma, “Cost benefit analysis of a three unit complex system with correlated failures and repairs”, RdE J. of Mathematical Sciences, Vol.1, Issue 3, pp. 213-226 (2006).

110. **Rakesh Gupta**, Satish Kumar and D. C. Agarwal, “A k-out of-n trichotomous system with common cause failure”, RDE, J. of Mathematical Sciences, Vol.1, Issue 3, pp. 281-296 (2006).
111. **Rakesh Gupta** and Gaurav Varshney, “A two non-identical unit parallel system with Geometric failure and repair time distributions”, IAPQR Trans. Vol. 31, No. 2, pp 127–139 (2006).
112. **Rakesh Gupta**, Satish Kumar and Vikas Tyagi, “A two duplicate unit parallel system with correlation in failure and repair/replacement”, Proceeding of National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences held at D.N. College Meerut, pp. 23-29, Nov.2006.
113. **Rakesh Gupta**, Madhu Mahi and Vishal Sharma, “A two non-identical unit deteriorating standby system under varying workload”, Proceeding of National Conference on ‘Information Technology: Setting Trends in Modern Era’ and 8th Annual Conference of Indian Society of Information Theory and Applications held at N.C. College of Engineering, Israna(Panipat), Haryana, pp. 115-122, March 2006.
114. **Rakesh Gupta**, Pradeep kumar Sharma and Shivakar, “A two priority unit cold standby system with rest period of repairman and correlated failure and repair times”, Proceeding of National Conference on ‘Information Technology: Setting Trends in Modern Era’ and 8th Annual Conference of Indian Society of Information Theory and Applications held at N.C. College of Engineering, Israna (Panipat), Haryana, pp. 320-329, March 2006.
115. **Rakesh Gupta**, Pradeep Chaudhary and Dharmendra Kumar, “Stochastic analysis of a two unit cold standby system with different operative modes and different repair policies”, Int. J. Agricult. Stat. Sciences, Vol. 3, No. 2, pp. 387-394 (2007).
116. **Rakesh Gupta**, Pradeep Chaudhary and Vishal Sharma, “Analysis of a two unit system model with the mixture of active and passive redundancies”, J. of Ravishankar University, Vol. 20. No. B (Science), pp. 73-86 (2007).
117. **Rakesh Gupta** and Kailash Kumar, “Cost benefit analysis of distillery plant system”, Int. J. Agricult. Stat. Sciences, Vol. 3, No. 2, pp. 541-554 (2007).
118. **Rakesh Gupta** and Gaurav Varshney, “A two identical unit parallel system with Geometric failure and repair time distributions”, J. of Comb. Info. & System Sciences, Vol. 32, No. 1-4, pp 127–136 (2007).
119. Praween Kumar and **Rakesh Gupta**, “Reliability analysis of a single unit M/G/1 system model with helping unit”, J. of Comb. Info. & System Sciences, Vol. 32, No. 1-4, pp. 209-219 (2007).

120. **Rakesh Gupta** and Vishal Sharma, “A Two Non-Identical Unit Standby System with Correlated Working and Rest Time of Repairman”, J. of Comb. Info. & System Sciences, Vol. 32, No. 1-4, pp. 241-255 (2007).
121. **Rakesh Gupta**, Pradeep Kumar Sharma and Vishal Sharma, “An Operating Orbit System with Two Dissimilar Units and Corresponding Standbys”, Journal of Statistics & Management Systems, Vol. 11, No. 1, pp. 65-76 (2008).
122. **Rakesh Gupta**, Madhu Mahi and Vishal Sharma, “A Two Component Two Unit Standby System with Correlated Failure and Repair Times”, Journal of Statistics & Management Systems, Vol. 11, No. 1, pp. 77-90 (2008).
123. **Rakesh Gupta** and Kailash Kumar, “A Two Unit Complex System with Correlated Failure and Repair Times”, Pure and Applied Matematika Sciences, Vol. LXVII, No. 1-2, pp. 23-34 (2008).
124. **Rakesh Gupta**, Pradeep Chaudhary and Kailash Kumar, “Cost-Benefit Analysis of a Single-Unit System Model with Helping Unit” Pure and Applied Matematika Sciences, Vol. LXVII; No. 1-2, March 2008.
125. **Rakesh Gupta**, Ram Kishan and Dharmendra Kumar, “Profit Analysis of a Three Unit Redundant System with Correlated Failure and Repair Times.” J. of Rajasthan Academy of Physical Sciences; Vol. 7, No. 2, pp. 169-178 (2008).
126. **Rakesh Gupta**, Ram Kishan and Dharmendra Kumar, “Stochastic Analysis of a Blood Bank System Model” Gujarat Statistical Review, Vol. 34&35; No. 1-2, pp. 56-67 (2007-08).
127. **Rakesh Gupta**, Ram Kishan and Dharmendra Kumar, “Complex System with Two Physical Conditions of Repairman and Inverse Gaussian Repair Time Distribution.” J. of Rajasthan Academy of Physical Sciences; Vol. 8, No.3, pp. 311-318(2009).
128. Reshu Agrawal, **Rakesh Gupta** and J.K. Garg, “A Hierarchical Model for Estimating Methane Emission from Wetlands using MODIS Data and ARIMA Modeling.” J. Indian Soc. Remote Sens., Vol. 37, pp. 473-481 (2009).
129. **Rakesh Gupta**, C.K. Goel and Archana Tomar, “Cost-Benefit Analysis of a Three-Unit Standby System with Delayed Replacement, Repair and Post Repair”, Rajasthan Academy of Physical Sciences, Vol. 9, No.1, pp. 41-50 (2010).
130. **Rakesh Gupta**, C.K. Goel and Archana Tomar, “Analysis of a Two-Unit Standby System with Correlated Failure and Repair and Random Appearance and Disappearance of Repairman”, J. of Reliability and Statistical Studies, Vol. 3, No.1, pp. 53-61 (2010).
131. **Rakesh Gupta**, Gaurav Varshney and Dharmendra Kumar, “Profust Reliability Analysis of a Degradable System Having a Number of Non-Identical Redundant Units”, Int. J. of Statistics and Systems, Vol. 5, No. 2, pp. 93-98 (2010).

132. **Rakesh Gupta**, C.K. Goel and Archana Tomar, "A Two Dissimilar Unit Parallel System with Administrative Delay in Repair and Correlated Life Times", Int. Trans. in Mathematical Sciences and Computer, Vol. 3, No. 1, pp. 103-112 (2010).
133. **Rakesh Gupta**, Pradeep Sharma and Vishal Sharma, "Cost-Benefit Analysis of a Two Duplicate-Unit Parallel System with Repair/Replacement and Correlated Lifetimes of Units", Rajasthan Academy of Physical Sciences, Vol. 9, No. 4, pp. 317-330 (2010).
134. **Rakesh Gupta**, Gaurav Varshney and Vishal Sharma, "The Stochastic Modeling and Analysis of Milk Powder Making System in a Dairy Plant", Aligarh J. of Statistics, Vol. 30, pp. 1-13 (2010).
135. **Rakesh Gupta** and Shivakar, "Cost-Benefit Analysis of a Two-Unit Parallel System with Correlated Failure and Repair Times", IAPQR Transactions, Vol. 35, No. 2, pp. 117-140 (2010).
136. **Rakesh Gupta**, S.C. Sharma and Vikas Saxena, "A Two Non-Identical Unit Cold Standby System with Random Change, Imperfect Switching Device and Correlated Failure and Repair of Units", Int. Transactions in Mathematical Sciences and Computers, Vol. 13, No. 2, pp. 287-296 (2010).
137. **Rakesh Gupta** and Vishal Sharma, "A Two-Unit Standby System with Preventive Maintenance and Inverse Gaussian Repair Time Distribution" J. of Informatics and Mathematical Sciences, Vol. 2, No. 2-3, pp.183-191 (2010).
138. **Rakesh Gupta**, Punam Phartyal and O.K. Belwal, "Stochastic Analysis of an Air Condition Cooling System Model", Journal of Reliability and Statistical Studies, Vol. 4, No. 1, pp. 95-106 (2011).
139. S.C. Sharma, **Rakesh Gupta** and Vikas Saxena, "A Two-Unit Standby System with Two Operative Models of Priority Unit and Gamma Repair Time Distributions", ISST Journal of Mathematics and Computing System, Vol. 2, No. 1, pp. 47-52 (2011).
140. **Rakesh Gupta**, Punam Phartyal and Bhupendra Singh, "Classical and Bayesian Stochastic Analysis of an Industrial System", IAPQR Transaction, Vol. 36, No.2, pp.-133-154 (2011).
141. **Rakesh Gupta**, Ram Kishan and Dharmendra Kumar, "Cost Benefit Analysis of a Two Non-Identical Unit Standby System with Preventive Maintenance", J. of Combinatorics, Information and System Sciences, Vol. 37, No. 1, pp.21-31 (2012).
142. S.C. Sharma, **Rakesh Gupta** and Vikas Saxena, "A Two Unit Parallel System with Dependent Failure Rates and Correlated Working and Rest Time of Repairman", International Journal of Agricultural and Statistical Sciences, Vol. 8, No. 1, pp.145-155 (2012).

143. **Rakesh Gupta** and Punam Phartyal, “Stochastic Analysis of a Two Non-Identical Unit Man-Machine System with Correlated Working and Rest Time of Operator”, International Journal of Agricultural and Statistical Sciences, Vol. 8, No. 2, pp.519-528 (2012).
144. **Rakesh Gupta** and Arti Tyagi, “A Two Unit Standby System with Imperfect Switching Device and Preparation for Repair of a Failed Unit”, Proceedings of VII International Symposium on Optimization and Statistics, AMU, Aligarh (Dec. 21-23) (2012).
145. **Rakesh Gupta**, Pankaj Kumar and Amit Gupta, “Cost Benefit Analysis of a Two Dissimilar Unit Cold Standby System with Weibull Failure and Repair Laws”, International Journal of System Assurance Engineering and Management, Vol.4(4),pp327-334(2013).
146. **Rakesh Gupta**, C.K. Goel and Archana Tomer, “Cost-Benefit Analysis of a Two-Unit Active Redundant System with Bivariate Exponential Distribution of Working and Rest Time of Repairman”, Collection of Recent Statistical Methods and Applications, Published by Statistics Department, University of Kerala, pp. 295-306 (2013).
147. **Rakesh Gupta** and Arti Tyagi, “Cost-Benefit Analysis of a Three-Unit Repairable Load Sharing Complex System Under Hardware and Human Failure”, J. of Rajasthan Academy of Physical Sciences, Vol. 12, No. 1, pp. 63-76 (2013).
148. **Rakesh Gupta** and Parul Bhardwaj, “A Two-Unit Standby System with Two Operative Modes of the Units and Preparation Time for Repair”, Journal of Reliability and Statistical Studies, Vol. 6, No. 1, pp. 87-100 (2013).
149. **Rakesh Gupta**-and Parul Bhardwaj,”A Two-Unit Standby System with Two Repair Facilities and Correlated time to Preventive Maintenance and Preventive Maintenance Time”. J. of Assam Statistical Review Vol.27, No.1, pp 15-33 (2013).
150. **Rakesh Gupta** and Parul Bhardwaj, “A Two-Unit Standby System with Regular Repairman and Waiting Time of Skilled Repairman”, Journal of Mathematical and Computational Science, Vol. 3, No. 4, pp. 1115-1130 (2013).
151. **Rakesh Gupta** and Arti Tyagi, “Stochastic Analysis of a Two-Unit Warm Standby System with Two-Phase Repair and Geometric Distributions”, Journal of Mathematical and Computational Science, Vol. 3, No. 6, pp. 1586-1600 (2013).
152. **Rakesh Gupta**, Pradeep Kumar Sharma and Shivakar, “A Two-Unit Active Redundant System with Two Physical Conditions of Repairman and Correlated Life Times”, Journal of Ravishankar University, Vol. B-24-26, pp. 40-51 (2013).
153. **Rakesh Gupta** and Parul Bhardwaj, “A Discrete Parametric Markov-Chain Model of a Two-Unit Warm Standby System with Rest Period of Repairman”, IAPQR Transactions, Vol. 38, No. 2, pp. 111-127 (2013).

154. **Rakesh Gupta** and Parul Bhardwaj, “A Discrete Parametric Markov-Chain Model of a Two Non-Identical Unit Cold Standby System with Preventive-Maintenance”, International Journal of Research and Review in Applied Sciences, Vol. 17, No. 3 (2013).
155. **Rakesh Gupta** and Parul Bhardwaj, “Analysis of a Discrete Parametric Markov-Chain Model of a Two-Unit Cold Standby System with Repair Machine Failure”, International Journal of Scientific and Engineering Research, Vol. 5, No. 2, pp. 921-927 (2014).
156. **Rakesh Gupta** and Swati Kujal, “Probabilistic Standby System with Multi-Component, Repair, Inspection and Post-Repair of a Unit”, International Journal of Scientific and Engineering Research, Vol. 5, No. 2, pp. 1763-1770 (2014).
157. **Rakesh Gupta**, Madhu Mahi and Arti Tyagi, “Analysis of a Three-Unit Complex System with Correlated Life-Times”, International Journal of Scientific and Engineering Research, Vol. 5, No. 3 pp. 596-601 (2014).
158. **Rakesh Gupta** and Parul Bhardwaj, “A Discrete Parametric Markov-Chain Model of a Two Non-Identical Unit Cold Standby System with Repair, Inspection and Post-Repair”, Journal of Ravishankar University, Raipur, Vol. B-27, pp. 82-91 (2014).
159. **Rakesh Gupta** and Arti Tyagi, “Cost-Benefit Analysis of a Three Unit Complex System with Load Sharing Units Working in Parallel”, Journal of Ravishankar University, Raipur, Vol. B-27, pp. 92-101 (2014).
160. **Rakesh Gupta** and Arti Tyagi, “Stochastic Analysis of a single Unit with a Protective Unit Discrete Parametric Markov-Chain System Model”, International Journal of Scientific and Research Publications, Vol. 4, No. 4 (2014).
161. **Rakesh Gupta** and Arti Tyagi, “A Two-Identical Unit Cold Standby System with Switching Device and Geometric Failure and Repair Time Distributions”, Aligarh Journal of Statistics, Vol. 34, pp.55-66 (2014).
162. **Rakesh Gupta** and Arti Tyagi, “Stochastic Analysis of a Discrete Parametric Markov Chain Model of a Complex System Consisting of Two Sub-Systems”. J. of Reliability and Statistical Studies, Vol.-7, pp.143-155(2014).
163. **Rakesh Gupta** and Arti Tyagi, “A Two-Non-Identical Unit Standby System with Two Repairmen and Correlated Failure and Repair Times” Math. Modeling and Applications, Failure and Repair Times,” Math. Modeling and Applications, Lambert Academic Publisher, pp. 164-177(2014).
164. **Rakesh Gupta** and Parul Bhardwaj, “Performance Measures of a Two-Unit Warm Standby System Model with Repair, Inspection and Post-Repair,” Math. Modeling and Applications, Lambert Academic Publisher, pp-178-191(2014).

165. **Rakesh Gupta** and Swati Kujal, "Cost-Benefit Analysis of a 2-out-of 3 Unit Discrete Parametric Markov Chain System Model," Math. Modeling and Applications, Lambert Academic Publisher, pp.-192-204(2014).
166. **Rakesh Gupta and Swati Kujal**, "Stochastic Analysis of a Two Unit Standby System Model of Discrete Parametric Markov Chain with Two Operative Modes of Priority Unit," Mathematics in Engineering Science and Aerospace, Vol – 6(2), pp. 255-268 (2015).
167. **Rakesh Gupta and Parul Bhardwaj**, "A Three Unit Complex System Model with a Repair Equipment and Correlated Failure and Repair Times," Mathematics in Engineering Science and Aerospace, Vol – 6(2), pp. 327-340(2015).