

CURRICULAM VITAE

1. *Name* : **Dr. Rakesh Gupta**
2. *Fathers' Name* : **Sh. R. K. Gupta**
3. *Date of Birth* : Dec. 29, 1959
4. *Designation* : **Professor & Head**
5. *Office Address* : Dept. of Statistics
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7. *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.

8. *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

9. *Teaching Experience* : (17 Years)

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

10. *Research Experience* : 23 Years

11. *Research Guidance* :

- (i) Till date guided forty two (50) M. Phil. dissertations in Statistics.
- (ii) Till date fifteen (20) students have completed their Ph. D. thesis under my supervision (See Annexure ‘A’).
- (iii) One Ph. D. thesis is ready to be submitted for valuation.
- (iv) Five students are still working for their Ph. D. work under my supervision in which one is getting J.R.F. (C.S.I.R., New Delhi), (See Annexure ‘B’).

12. *Details of Publication* :

- (i) One hundred two (123) 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) and Int. J. of Productivity Quality and Reliability (Kolkata), Aligarh J. of Statistics (A.M.U.) and Gujarat Statistical Review (Ahmadabad). –See Annexure-C
- (ii) Contributed a 50 pages chapter titled “Analysis of 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.

13. *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 Modelling, 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.

14. *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

15. *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 Safty (USA), J. of Quality in Maintenance Engineering (Saudi Arabia), J. of Ravishankar University

- (Raipur), Gujarat Statistical Review (Ahmadabad), Aligarh J. of Statistics (Aligarh), IMA J. of Applied Mathematics (U.K.) and Int. J. of Systems Science (U.K.).
- (ii) Evaluated a number of M.Phil. / Ph.D. Thesis of various Universities, worked as a Paper-Setter of Public Service Commission – U.P. and M.P. and various Universities.
 - (iii) Acting as a member of Board of Studies in H.N.B. Garhwal University, Srinagar since last seven 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) Acting as coordinator of National Mathematical Olympiad of Meerut region since 2003.

Date :

(**Rakesh Gupta**)

LIST OF STUDENTS WHO HAVE COMPLETED THEIR Ph.D.

1. **Mr. Sachendra Bansal**, “Cost benefit Analysis of Some Repairable 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 Modelling 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”. (Thesis Submitted, 2006).

Annexure – ‘B’

LIST OF STUDENTS WORKING FOR THEIR Ph.D.

1. **Mr. Rahul Sharma**, “Model Building of Some Repairable Systems and their Cost Benefit Analysis”.
2. **Mr. Vishal Sharma**, “Analysis of Some Engineering System Models by Regenerative Point Technique”.
3. **Km. Reshu Agarwal**, “Model Building and Stochastic Analysis of Some Repairable Redundant Systems”.
4. **Mr. Kailash Kumar**, “Profit Analysis of Some Engineering System Models”.
5. **Mr. Dharmendra Kumar**, “Stochastic Analysis of Some Redundant System Models”.
6. **Km. Archana Tomar**, “Stochastic Analysis of Some Repairable Engineering System Models”.

Annexure – ‘C’

LIST OF RESEARCH PAPERS

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 multicomponent 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", *Int. J. 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, 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).
69. 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).
70. 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).
71. 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).
72. 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).
73. **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).
74. 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).
75. **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).
76. 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).
77. 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).

78. **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).
79. **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).
80. 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).
81. L.R. Goel, **Rakesh Gupta** and P.K. Tyagi, "Analysis of a two-unit standby system with preparation time and correlated failures and repairs", *Microelectron Reliab.*, Vol.-35, No. 8, pp. 1163-1165 (1995).
82. **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).
83. **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).
84. **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).
85. **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*, 27(6), pp. 561-566 (1996).
86. 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).
87. **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).
88. **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).
89. **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).
90. **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).
91. **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).

92. **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(2), pp. 128-140 (1999).
93. **Rakesh Gupta**, Ram Kishan and Pawan Kumar, "A two-non-identical –unit parallel system with correlated lifetimes", *Int. J. of Systems Science*, 30(10), pp. 1123-1129 (1999).
94. **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*, 30(12), pp. 1309-1317 (1999).
95. **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).
96. **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).
97. **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).
98. 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).
99. **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).
100. **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).
101. **Rakesh Gupta** and Shivakar, "Analysis of a stochastic model of cloth weaving system", *IAPQR*, Vol. 28, No. 1, pp. 83-99 (2003).
102. **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).
103. **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).
104. **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).

105. **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.
106. **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) .
107. **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).
108. **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).
109. **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).
110. **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).
111. **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 Resent Trends in Advancement of Mathematical and Physical Sciences held at D.N. College Meerut, pp. 23-29, Nov.2006.
112. **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.
113. **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.
114. **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).
115. **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).
116. **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).

117. **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).
118. 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).
119. **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).
120. **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).
121. **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).
122. **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).
123. **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, pp. 53-62 (2008).