

Detail on research papers published during the last five years

Prof. Jagdish Saran (Professor and Head)

1. Saran, J. and Pandey, A. (2009) : Recurrence relations for marginal and joint moment generating functions of generalized order statistics from generalized exponential distribution. *J. Appl. Statist. Sci.*, 17, No. 1, 13-24.
2. Saran, J. and Pandey, A. (2009) : Recurrence relations for single and product moments of generalized order statistics from linear-exponential and Burr distributions. *Journal of Statistical Theory and Applications*, 8, No. 3, 383-391.
3. Saran, J. and Singh, S.K. (2010) : Some general identities among single moments of order statistics. *Asian Journal of Mathematics and Statistics*, 3, No. 1, 25-32.
4. Saran, J. and Pandey, A. (2010) : Concomitants of record values from Marshall and Olkin's bivariate exponential distributions. *International Journal of Statistical Sciences*, 10, 1-8.
5. Saran, J. and Pushkarna, N. (2010) : Moments of order statistics from a general class of doubly truncated continuous distributions. *Pak. J. Statist.*, 26, No. 2, 327-337.
6. Saran, J. and Pandey, A. (2010) : Estimation of parameters of a Pareto distribution and its characterization by k^{th} record values. *Journal of Statistical Studies*, 29, 09-17.
7. Saran, J. and Pandey, A. (2010) : Estimation of parameters and prediction for Burr Type X distribution based on k -th record values. *AcharyaNagarjuna University Journal of Physical Sciences*, 2, No.2, 61-72.
8. Saran, J. and Pandey, A. (2011) : Recurrence relations for marginal and joint moment generating functions of dual generalized order statistics from inverse Weibull distribution. *Journal of Statistical Studies*, 30, 65-72.
9. Saran, J. and Pande, V. (2012) : Recurrence relations for moments of progressively type-II right censored order statistics from half logistic distribution. *Journal of Statistical Theory and Applications*, Vol. 11, No. 1, 87-96.
10. Pushkarna, N., Saran, J. and Tiwari, R. (2012) : Recurrence relations for higher moments of order statistics from doubly truncated exponential distribution. *International Mathematical Forum*, 7, No. 4, 193-201.
11. Saran, J. and Pandey, A. (2012) : Recurrence relations for marginal and joint moment generating functions of dual generalized order statistics from power function distribution. *Pak. J. Statist.*, 28, No. 2, 231-238.
12. Saran, J. and Nain, K. (2012) : Recurrence relations for single and product moments of generalized order statistics from doubly truncated p -th order exponential distribution. *Journal of the Kerala Statistical Association*, 23, 01-16.
13. Saran, J. and Nain, K. (2012) : Relationships for moments of k -th record values from doubly truncated p -th order exponential and generalized Weibull distributions. *ProbStat Forum*, 05, 142-149.
14. Saran, J. and Nain, K. (2012) : Recurrence relations for single and product moments of k -th record values from p -th order exponential distribution and a characterization. *JahangirnagarUniversityJournal of Statistical Studies*, 31, 35-41.

15. Saran, J. and Nain, K. (2013) : Combinatorial approach to M/M/1 queues using hypergeometric functions. *International Mathematical Forum*, 8, No. 10, 463-472.
16. Pushkarna, N., Saran, J. and Tiwari, R. (2013) : Bonferroni and Gini indices and recurrence relations for moments of progressive type-II right censored order statistics from Marshall-Olkin exponential distribution. *Journal of Statistical Theory and Applications*, 12, No. 3, 306-320.
17. Saran, J. and Kumari, Taruna (2013) : Recurrence relations for marginal and joint moment generating functions of upper k-record values from Gompertz distribution. *ProbStat Forum*, 06, 96-106.
18. Pushkarna, N., Saran, J. and Tiwari, R. (2013) : Recurrence relations for higher moments of order statistics from doubly truncated Burr distribution. *STATISTICA*, 73, No. 2, 253-265.
19. Pushkarna, N., Saran, J. and Tiwari, R. (2013) : Relationships for moments of order statistics from the doubly truncated Bass diffusion model. *Far East Journal of Theoretical Statistics*, 45, No. 2, 165-176.
20. Saran, J. and Nain, K. (2013) : On explicit expressions for single and product moments of generalized order statistics from a new class of exponential distributions and a characterization. *Journal of the Kerala Statistical Association*, 24, 37-52.
21. Athar, H., Akhter, Z. and Saran, J. (2014) : Moments of progressive type-II right censored order statistics from Lindley distribution. *Statistics Research Letters*, 3, No. 1, 1-6.
22. Saran, J. and Nain, K. (2014) : On exact moments of lower generalized order statistics from a class of exponential distributions and its characterization. *International Journal of Statistika and Matematika*, 9, No.3, 85-93.
23. Saran, J. and Singh, Sarbjit (2014) : On the expected values of order statistics and of the range from a discrete uniform distribution. To appear in AcharyaNagarjuna University Journal of Physical Sciences,
24. Saran, J., Kumar, D., Pushkarna, N. and Tiwari, R. (2014) : L-moments and TL-moments estimation and recurrence relations for moments of order statistics from exponentiated inverted Weibull distribution. *Statistics Research Letters (SRL)*, 3, 63-71.
25. Saran, J. and Pushkarna, N. (2014) : Moments of progressive type-II right censored order statistics from a general class of doubly truncated continuous distributions. *Journal of Statistical Theory and Applications*, 13, No. 2, 162-174.
26. Kumar, D. and Saran, J. (2014) : Ratio and inverse moments of k-th record values from Marshall-Olkin log-logistic distribution. *Pacific Journal of Applied Mathematics*, 6, No. 2, 11-21.

Dr. Gurprit Grover (Associate Professor)

1. Gurprit Grover, Rumi Dutta, A.K. Gadpayle, SalilSaha (2009): Changing patterns of cardiovascular risk factors and heart related sickness in relation with acute myocardial infarction in Delhi, India. *Journal of Indian Medical Association*, Vol. 107, pp. 636-642.
2. Gurprit Grover, A.K Gadpayle and Rumi Dutta (2009): A study of cardiovascular risk factors in Delhi, India. *Journal of Communicable Diseases (JCD)* 41(2), pp. 71-80 , ISSN 0019-5138.
3. Gurprit Grover and Rumi Dutta (2009): Survival analysis of acute myocardial infarction patients using non-parametric and parametric approaches. *Electronic Journal of Applied Statistical Analysis (EJASA)* 1, pp.22-36. ISSN 2070-5948.
4. Gurprit Grover, A.K. Gadpayle, Alka Sabharwal (2010). Identifying patients with diabetic nephropathy based on serum creatinine under zero truncated model, *Electronic Journal of Applied Statistical Analysis*, Vol. 3, Issue 1, pp. 28-43, ISSN 2070-5948.
5. Gurprit Grover, A.K. Gadpayle and Neeta Makhija (2010). On the estimation of survival time of cardio-vascular disease patients using parametric and semi-parametric methods. *Electronic Journal of Applied Statistical Analysis (EJASA)*, vol. 3 Issue 1, pp. 1-17, ISSN 2070-5948.
6. Nezhat Shakeri and Gurprit Grover (2010): Estimation of survivorship function based on doubly censored data with application to HIV/AIDS. *Communications in Statistics—Theory and Methods*, Vol. 39, pp. 777–790, ISSN: 0361-0926.
7. Gurprit Grover and Neeta Makhija (2010). On the estimation of survival and death probabilities under myocardial infarctions in the presence of competing risks based on an illness-death model. *Journal of Communicable Diseases*, Vol. 42, pp. 1-17, ISSN 0019-5138.
8. Siddhendu Biswas, Sejong Bae, Karan P. Singh, Gurprit Grover, Manoj Kumar Varshney (2011). On an empirical Bayes estimator for the BLUE of HIV population based on CD4 cell count. *Far East Journal of Theoretical Statistics*. Vol. 34, Number 2, pp 85–108 (ISSN 0972-0863).
9. Siddhendu Biswas, Gurprit Grover, Manoj Kumar Varshney (2011). A method of construction: A multiple increment- decrement life table of HIV population. *International Journal of Medical and Biological Frontiers*, Vol. 17, Issue 3, pp 187-200 (ISSN 1081-3829).
10. Gurprit Grover and Dulumoni Das (2011). Decrement table and the estimation of HIV mortality rate with an application to Hemophilia-associated AIDS. *Journal of AIDS and HIV Research*, Vol. 3(1), pp 11-19.
11. Gurprit Grover and Dulumoni Das (2011). On the estimation of the expected proportion of AIDS cases using Bayesian approach. *The IUP Journal of Computational Mathematics*, Vol. IV(2), pp 37-48.
12. Gurprit Grover and Tanushree Banerjee (2011). Estimation of survival times of HIV-1 infected children for doubly and interval censored data. *Electronic Journal of Applied Statistical Analysis*, Vol. 4, Issue 2, pp. 155-163. (ISSN 2070 – 5948).

13. Gurprit Grover, A.K. Gadpayle, Alka Sabharwal(2012). Identifying patients with diabetic nephropathy based on serum creatinine in the presence of covariates in type-2 diabetes: A retrospective study. *Biomed Res- India*, 23 (4), pp. 615-624(ISSN 0970-938X).
14. Gurprit Grover, and Alka Sabharwal (2012). A parametric approach to estimate survival time of diabetic nephropathy with left truncated and right censored data. *International Journal of Probability and Statistics*, Vol 1(1), pp.128-137(ISSN 1927-7032).
15. Grover G., Gadpayle A.K and Varshney M.K (2012), On the estimation of probability of death of AIDS patients in the presence of competing risks, *Aligarh Journal of Statistics*, 32;69-83
16. Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2013). A Bayesian Approach for Estimating Onset Time of Nephropathy for Type 2 Diabetic Patients Under Various Health Conditions. *International Journal of Statistics and Probability(Canada)*, 2(2), pp: 89-101
17. Gurprit Grover, Adesh Kumar Gadpayle, Prafulla Kumar Swain, and Barnali Deka (2013). A Multistate Markov Model Based on CD4 Cell Count for HIV/AIDS Patients on Antiretroviral Therapy (ART). *International Journal of Statistics in Medical Research (Canada)*, Vol. 2, pp:144-151.
18. Gurprit Grover, Rabindranath Das, Prafulla Kumar Swain and Barnali Deka, (2013). On the Estimation of Survival of HIV/AIDS Patients on Antiretroviral Therapy Using NPMLE Method: An Application to Interval Censored Data, *American Journal of Mathematics and Statistics (USA)*, 3(4); pp: 213-219.
19. Gurprit Grover, Ravi Vajala and Manoj Kumar Varshney (2013). On the estimation of Average HIV population using various Bayesian techniques, *Applied Mathematics (USA)*, 3(3), pp: 98-106.
20. Gurprit Grover, V. Sreenivas, Sudeep Khanna and Divya Seth (2013). Estimation of Survival of Liver Cirrhosis Patients, in the Presence of Prognostic Factors Using Accelerated Failure Time Model as an Alternative to Proportional Hazard Model, *International Journal of Statistics and Applications (USA)*, 3(4), pp: 113-122.
21. Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2013). An Application of Gamma Generalized Linear Model for Estimation of Survival Function of Diabetic Nephropathy Patients, *International Journal of Statistics in Medical Research (Canada)*, vol-2, pp: 209-219.
22. Gurprit Grover, A.K. Gadpayle, Vajala Ravi and M.K. Varshney (2013). On the estimation of intensities, illness probabilities and expected duration of stay in various states of AIDS patients undergoing Antiretroviral Therapy, *Journal of Applied Probability and Statistics (USA)*, 8(2), pp. 01-09.
23. Gurprit Grover, V Sreenivas, Sudeep Khanna, Divya Seth (2013). Multi state markov model: an application to liver cirrhosis. *Statistics in Transition-new series,(Poland)*; 14(3), pp: 429-442.
24. Gurprit Grover and Barnali Deka (2013). Spline-based Hazards Regression Model for Current Status Data: An Application to Simulated Data on Renal Impairment, *Indian journal of Applied Research(India)*, 3(12), pp 534-537.

25. Gurprit Grover and Barnali Deka (2013). Modeling the Risk of Renal Impairment using Current Status Chronic Kidney Disease Data: A Simulation based Analysis, Indian journal of Applied Research (India), 3(12), 12, pp 538-541.
26. Gurprit Grover and Divya Seth (2013) Application of Frailty Models on Advance Liver Disease Using Gamma as Frailty Distribution, Journal of Statistics Research Letters (USA), 3(1), pp: 42-50.
27. Gurprit Grover and Vajala Ravi (2014). On the estimation of expected survival time of AIDS patients undergoing Antiretroviral therapy using censored generalized Poisson regression model, TurkiyeKlinikleri J Biostat (Turkey), 6(1): pp: 24-32.
28. Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2014). Application of Multivariate and Bivariate Normal Distributions to Estimate Duration of Diabetes, International Journal of Statistics and Applications (USA), 4(1), pp: 46-57.
29. Gurprit Grover, Prafulla Kumar Swain and Vajala Ravi (2014). A Competing Risk Approach With Censoring to Estimate the Probability of Death of HIV/AIDS Patients on Antiretroviral Therapy in the Presence of Covariates, Journal of Statistics Research Letters (USA), 3(1), pp: 7-16.
30. Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2014) Estimation of Survival Function and Probability of Onset of Diabetic Nephropathy using Path Analysis and Analysis of Covariance, International Refereed Journal of Engineering and Science (IRJES) (India), 3(4), pp: 50-58.

Dr. Ajit Chaturvedi (Associate Professor)

1. Ajit Chaturvedi and Sanjeev K. Tomer (2009): Bayesian estimation of $P(X>Y)$ for the generalized life distributions. Journal of Scientific Research, 53, 239-251. ISSN:0976-2876
2. Ajit Chaturvedi, Kuldeep Chauhan and Md. Wasi Alam (2009): Estimation of the reliability function for a family of lifetime distributions under type I and type II censorings. Journal of Reliability and Statistical Studies, 2(2), 11-30. ISSN:0974-8024
3. Ajit Chaturvedi and Vandana Sharma (2010): A note on the estimation of $P(Y>X)$ in two-parameter exponential distributions. Statistics, 44 (1), 73-75. ISSN:0233-1888
4. Md. Wasi Alam and Ajit Chaturvedi (2010): Discriminating among overlapping parametric models and estimating survivorship function of insects mortality. International Journal of Computational Science and Mathematics, 2(1), 1-10. ISSN: 1752-5055
5. Ajit Chaturvedi and Md. Wasi Alam (2010): UMVUE and MLE in a family of lifetime distributions. Journal of the Indian Statistical Association, 48(2), 189-213. ISSN:0537-2585
6. Ajit Chaturvedi and Vandana Sharma (2011): Bayesian life test planning for a family of lifetime distributions: some approximate solutions. Journal of Probability and Statistical Science, 9(2), 169-178. ISSN: 2168-4871
7. Ajit Chaturvedi and Anupam Pathak (2012): Estimation of the reliability function for exponentiated Weibull distribution. Journal of Statistics and Applications, 7(3-4), 113-120. ISSN:0973-4600

8. Ajit Chaturvedi, Md. Wasi Alam and Kuldeep Chauhan (2013): Robustness of the sequential testing procedures for the parameters of zero-truncated negative binomial, binomial and Poisson distributions. *Journal of the Indian Statistical Association*: accepted for publication. ISSN:0537-2585
9. Ajit Chaturvedi and Sudeepta Ghosh (2013): Estimating the reliability function for a family of inverse distributions. *Journal of Probability and Statistical Science*, 11(1), 59-78. ISSN:2168-4871
10. Ajit Chaturvedi and Sudeepta Ghosh (2013): Estimation of the reliability function for Gompertz distribution under type I and type II censoring. *International Journal of Agricultural and Statistical Sciences*, 9(1), 1-22. ISSN: 0973-1903
11. Ajit Chaturvedi and Anupam Pathak (2013): Bayesian estimation procedures for three parameter exponentiated Weibull distribution under entropy loss function and type II censoring. *interstat.statjournals.net/YEAR/2013/abstracts/1306001.php* ISSN: 1941-689X
12. Vandana Sharma and Ajit Chaturvedi (2013): Bayesian life test planning for a family of inverse distributions: some exact and approximate solutions. *International Journal of Agricultural and Statistical Sciences*: accepted for publication. ISSN:0973-1903
13. Anupam Pathak and Ajit Chaturvedi (2013): Bayesian estimation procedures for exponentiated family of lifetime distributions under squared error and entropy losses. *International Journal of Mathematical Analysis*: accepted for publication. ISSN1312-8876 (print) ISSN 1314-7579 (online)
14. Anupam Pathak and Ajit Chaturvedi (2013): Estimation of the reliability function for four-parameter exponentiated generalized Lomax distribution. *International Journal of Scientific and Engineering Research*, 5(1), 1171-1180.
15. Ajit Chaturvedi and Anupam Pathak (2013): Estimation of the reliability function for two-parameter exponentiated Pareto distribution under type II censoring. *Journal of Mathematics and Statistics*: accepted for publication. ISSN 0974-7117 (Print), ISSN 0973-8347 (Online)
16. Ajit Chaturvedi and Anupam Pathak (2014): Bayesian estimation procedures for three-parameter exponentiated – Weibull distribution under squared-error loss function and type II censoring. *World Applied Sciences Journal*: accepted for publication. ISSN : 1818-4952, EISSN : 1991-6426
17. Md. Wasi Alam, Ajit Chaturvedi and Anil Kumar (2014): Estimation of survival function under type II censoring using a generalized family approach. *Journal of Agricultural and Statistical Sciences*: accepted for publication. ISSN:0973-1903
18. Ajit Chaturvedi and Anupam Pathak (2014): Estimating the reliability function for a family of exponentiated distributions. *Journal of Probability and Statistics*: accepted for publication. ISSN:1687-9538
19. Ajit Chaturvedi, Anupam Pathak and Taruna Kumari (2014): Estimation of the reliability function for transmuted Weibull distribution. *IJDR*: accepted for publication.
20. Anupam Pathak and Ajit Chaturvedi (2014): Estimation of the reliability function for two-parameter exponentiated Rayleigh or Burr type X distribution. *Statistics, Optimization and Information Computing*, 2, 305-322. ISSN 2310-5070 (online) ISSN 2311-004X (print)

Dr. Poonam Singh (Associate Professor)

1. Aggarwal, M. L., Singh, Poonam, Sarin, V. and Husain, B. (2009). Mixture Designs in Orthogonal Blocks using F-Squares, *Metron*, LXVII, n.2, 105-128.
2. Gupta, V. K., Singh, P., Kole, B., and Parsad, R. (2009). Construction of Unbalanced Mixed-Level Supersaturated Designs. *Statistics & Probability Letters*, 79, 2359-2366.
3. Gupta, V. K., Singh, P., Kole, B., and Parsad, R. (2009). Construction of Optimal Mixed-Level Supersaturated Designs. *Journal of the Indian Society of Agricultural Statistics*, 63, 117-122.
4. Gupta, V.K., Singh P., Kole, B. and Prasad, R. (2010). Construction of efficient balanced and nearly balanced two-level supersaturated designs. *Journal of Statistics and Applications*, 5, 179-194.
5. Gupta, V.K., Singh, P., Kole, B. and Parsad, R. (2010). Computer-aided construction of efficient multi-level supersaturated designs. *Journal of Statistical Theory and Practice*, 4, 221–231.
6. Gupta, V.K., Singh, P., Kole, B. and Parsad, R. (2010). Addition of runs to a two-level supersaturated designs. *Journal of Statistical Planning and Inference*, 140, 2531–2535.
7. Aggarwal, M. L., Singh, P., Sarin, V., and Husain, B. (2011). Nearly optimal orthogonally blocked designs for four components based on F-squares, *Communications in Statistics- Simulation and Computation*, 40:177-195.
8. Singh, P., and Panda M. K. (2011). Optimal Designs for Multi Response Mixture Experiments. *JISAS*, 65(1), 91-98.
9. Aggarwal, M.L., Singh, P. and Panda, M. K. (2011). A-Optimal designs for an Additive Cubic Model. *Statistics and Probability Letters*, 81, 259-266.
10. Singh, P., and Panda, M.K. (2011). Optimal design for second degree K-model for mixture experiments based on weighted simplex centroid designs, *METRON*, LXIX, n.3, 251-263.
11. Aggarwal, M. L., Singh, P., Sarin, V., and Husain, B. (2012). Optimal orthogonal block designs for four mixture components in two blocks based on F-squares for Becker's models and K-model, *Statistics*, iFirst, 1-19.
12. Aggarwal, M. L., Singh, P., Sarin, V., and Husain, B. (2012). Orthogonally blocked mixture component-amount designs via projections of F-squares, *Journal of the Korean Statistical Society*, 41, 49-60.
13. Singh, P., Thapliyal, P., and Budhraj, V. (2013). Construction of Trend Free Run Orders for Orthogonal Arrays using Linear Codes. *International Journal of Engineering and Innovative Technology*. Vol. 3, Issue 1, 69-73.
14. Singh, P., Thapliyal, P. and Budhraj, V. (2014). Construction of fractional factorial designs with some linear trend free effects through finite fields, *JCISS*, 39 (1), 57-76.
15. Singh, P., Budhraj, V. and Thapliyal, P. (2014). Trend free orthogonal arrays using some linear codes, *IJSER*, 5(7), 1512-1520.

Mr. Ashok Kumar (Assistant Professor on Adhoc)

1. Tomer, S. and Kumar, A. (2013), "The Exponentiated Lomax Distribution with Application to Bladder Cancer Susceptibility", *International Journal of Essential Sciences*, 7(2), 15-23. ISSN- 0973-8436
2. Tomer, S. and Kumar, A. (2014), "Traditional Moments and L-Moments Estimation for the Transmuted Exponentiated Lomax Distribution", *Anusandhan Anveshika*, Vol 4, 121-130. ISSN 2230-9179.

Dr. Kapil Kumar (Assistant Professor on Adhoc)

1. H. Krishna and K. Kumar (2011) "Reliability estimation in generalized gamma distribution with progressively censored data", *International Journal of Agricultural and Statistical Sciences*, 7(1), pp. 15-29. ISSN: 0973-1903.
2. H. Krishna and K. Kumar (2011) "Reliability estimation in Lindley distribution with progressively type II right censored sample", *Mathematics and Computers in Simulation*, 82(2), pp. 281-294. ISSN: 0378-4754. (Elsevier Science Publishers).
3. H. Krishna and K. Kumar (2013) "Reliability estimation in generalized inverted exponential distribution with progressively type II censored sample", *Journal of Statistical Computation and Simulation*. 83(6), pp 1007-1019. ISSN: 0094-9655. (Taylor & Francis).
4. K. Kumar, H. Krishna and R. Garg (2014) "Estimation of $P(Y < X)$ in Lindley distribution using progressively first failure censoring", *International Journal of System Assurance Engineering and Management*. DOI:10.1007/s13198-014-0267-9. ISSN: 0975-6809. (Springer).
5. K. Kumar and R. Garg (2014) "Estimation of the parameters of randomly censored generalized inverted Rayleigh distribution", *International Journal of Agricultural and Statistical Sciences*, 10(1), pp. 147-155. ISSN: 0973-1903.
6. H. Krishna, Vivekanand and K. Kumar (2014) "Estimation in Maxwell distribution with randomly censored data", *Journal of Statistical Computation and Simulation*. Available at <http://dx.doi.org/10.1080/00949655.2014.986483>. ISSN: 0094-9655. (Taylor & Francis).

Mr. Abhishek Kumar Umrawal (Assistant Professor on Adhoc)

1. Abhishek Kumar Umrawal (2013) "An Application of Logistic Regression to study Women Empowerment and Sex Discrimination", Published in the proceedings of International Conference on Empowerment of Women in Developing World organized by WDC, Shivaji College, University of Delhi in collaboration with Women's Studies and Development Centre, University of Delhi and NIDM, Ministry of Home Affairs, Govt. of India held on Apr 1 – Apr 2, 2013.

Ms. Garima Priyadarshini (Assistant Professor on Adhoc)

1. Shalini Thakur Singh, Natarajan Gayatri Priya, Jitendra Kumar, Vipin Singh Rana, R. Ellango, Adita Joshi, Garima Priyadarshini, R. Asokan, Raman Rajagopal (2012) Diversity and phylogenetic analysis of endosymbiotic bacteria from field caught demisia tadaci from different locations of north India, based on 16S rDNA library screening. Infection, Genetics and Evolution. doi:10.1016/j.meegid.2012.01.015.