



**DEPARTMENT OF STATISTICS  
FACULTY OF MATHEMATICAL SCIENCES  
UNIVERSITY OF DELHI  
DELHI-110007**



## **Recent Publications of the Faculty Members Since 2012**

The faculty members publish papers in national and international journals. The following is a partial list of the publication.

### **Research Publications**

#### **Year: 2024**

1. Pandey, R., Chand, D. B., & Tolani, H. (2024). Bayesian multiple linear regression model for GDP in India. *International Journal of System Assurance Engineering and Management*, 1-18. <https://doi.org/10.1007/s13198-023-02233-3>.
2. Singh, P. and Shukla, H. (2024). Uniform mixture designs using designs in 2-dimensional spherical region. *Journal of Xidian University*, **18**(2), 192-223.
3. 19. Kumar, S., Pathak, A., and Kumar, M. (2024). Bayesian estimation: Number of species from Poisson mixed exponential-gamma distribution using objective priors, *Journal of Statistics & Management Systems*, pp:703-720, <https://doi.org/10.47974/JSMS-1245>.
4. Saha, M., Devi, A., Yadav, A. S., & Maiti, S. S. (2024). Evaluation of a novel loss-based process capacity index and its applications. *International Journal of System Assurance Engineering and Management*, 1-14. [1007/s13198-023-02235-1](https://doi.org/10.1007/s13198-023-02235-1).
5. Saha, M., Pareek, P., Tripathi, H., and Devi, A. (2024). Time truncated attribute control chart for the generalized Rayleigh distributed quality characteristics and beyond. *International Journal of Quality and Reliability Management*. [10.1108/IJQRM-02-2023-0049](https://doi.org/10.1108/IJQRM-02-2023-0049).

#### **Year: 2023**

1. Pandey R., and Tolani H., (2023). A Bayesian Perspective of Middle-Batting Position in ODI Cricket. *Journal of Sports Analytics*. **9**(1), pp. 99 – 108.

2. Pandey, R., Chand, D. B., & Tolani, H. (2023). Bayesian multiple linear regression model for gross domestic product in Bhutan. *Advances and Applications in Statistics*, 87(2), 161-190.
3. Pandey, R., Chand, D. B., & Tolani, H. (2023). Bayesian Multiple Linear Regression Model for GDP in Nepal. *International Journal of Statistical Distributions and Applications*. 9(1), pp. 9-23. doi: 10.11648/j.ijisd.20230901.12
4. Singh, P., Mazumder, M. D. and Babu, S. (2023). Construction of Nearly Orthogonal Arrays Mappable into Fully Orthogonal Arrays of Strength Two and Three. *International Journal of Mathematics and Statistics*, 24(1), 37-50.
5. Banik, S., Das, M., Saha, I., Gong, R., Singh, P., Kim, J., and Das, R.N. (2023). Prostate cancer and cardiovascular disease: Correlated? *Onkologia i Radioterapia*, 17 (2), 55-6.
6. Akhter Z., Almetwally E. M. and Chesneau C. (2022): On the generalized Bilal distribution: Some properties and estimation under ranked set sampling. *Axioms*, 11(4), 173.
7. Pandey, R., and Chand, D. B. (2023). Modelling and Forecasting the Gross Domestic Product of the Nepal Using Autoregressive Integrated Moving Average Models. *International Journal of Statistics and Reliability Engineering*. Vol. 10 (2), pp. 456- 465.
8. Singh, P., and Sharma, R., (2023). Construction of Partial Diallel Crossing System using Latin Square Designs. *International Journal of Agricultural and Statistical Sciences*. Vol.19, No.2, pp. 851-858.
9. Singh, P., and Sharma, R., (2023). Construction of Complete Diallel Crossing System using Latin Square Designs. *International Journal of Statistics and Reliability Engineering*. Vol.10, No.3., pp. 597-602.
10. Singh, P., Mazumder, M. D. and Babu, S. (2023). Nearly Orthogonal Arrays Mappable into Symmetric Orthogonal Arrays of Strength Two. *International Journal of Statistics and Reliability Engineering*, 17(8), 621-638
11. Singh, P., Mazumder, M. D. and Babu, S. (2023). On the Construction of Mappable Nearly Orthogonal Arrays Using BIBD. *Journal of Xidian University*, 17(8), 621-638.
12. Singh, P., and Shukla, H. (2023). Uniform mixture designs using designs in 2-dimensional spherical region. *International Journal of System Assurance Engineering and Management*, 14(5), 1888-1897.

13. Singh, P., Mazumdar, M. D., and Babu, S. (2023). Mappable Nearly Orthogonal Arrays Using Projective Geometry. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 14(03), 454-464.
14. Singh, P., and Kumar, N. (2023). Orthogonal Latin Hypercube Designs with Eight Factors. *International Journal of Agricultural and Statistical Sciences*, 19(1), 427-434.
15. Chandra, G., Tampta, B.P., Mohanti, M., Pandey, A. and Latpate, R. (2023). Population and Production of Seed of *Buchanania lanzan* Spreng in Dhenkanal Forest Division of Odisha, India, *Indian Forester*, 149(11), 1133-1139.
16. Tyagi, S., Agiwal, V., Kumar, S., & Chesneau, C. (2023). Theory and practice of a bivariate trigonometric Burr XII distribution. *Afrika Matematika*, 34(3), 49.
17. Kumar S., Pathak A., Kumar M., Singh S., and Gupta R. (2023). Bayesian Inference for Functional Response of Stochastic Predator-Prey Model Using Non-Informative Prior International Journal of Agricultural and Statistical Sciences, Vol. 19, No. 2, pp. 891-898, pp:1-3. DOI: <https://doi.org/10.59467/IJASS.2023.19.891>.
18. Pathak, A., Kumar M., Singh S. and Singh U. (2023). Topp–Leone Poisson Exponential Distribution: A Classical and Bayesian Approach, *Journal of the Indian Society for Probability and Statistics*, Springer, pp: 393-417. DOI: [10.1007/s41096-023-00159-4](https://doi.org/10.1007/s41096-023-00159-4).
19. Pathak, A., Kumar M., Singh, S., Singh, U and Kumar, S. (2024). Bayesian estimation of the number of species from Poisson-Lindley stochastic abundance model using non-informative priors, *Computational Statistics*, Springer, pp: 1-24, <https://doi.org/10.1007/s00180-024-01464-7>.

### **Year: 2022**

1. Pandey, R., Srivastava, P. and Ali, D. (2022). Bayesian Risk Analysis for Length Biased Log Logistic Distribution under Different Loss Functions. *Journal of Scientific Research*, ISSN: 447-9483.
2. Pandey, R. and Srivastava, P. (2022). Bayesian Estimation for the Two Log-Logistic Models Under Joint Type II Censoring. *Journal of Reliability and Statistical Studies*, ISSN: 0974-8024.
3. Zuber Akhter, Ehab M. Almetwally and Christophe Chesneau (2022). On the Generalized Bilal Distribution: Some Properties. *Axioms*, MDPI, ISSN:2075-1680.

4. Akhter,Z., Mir Mostafae, S. M. T. K. and Ormoz E. On the Order Statistics of Exponentiated Moment Exponential. Journal of Statistical Computation and Simulation, Taylor & Francis, ISSN:1563-5163.
5. R. Pandey and P. Srivastava (2022). Estimation for the Length Biased LogLogistic Model Under Adaptive Progressive Type II Censoring. International Journal of System Assurance Engineering and Management, 1-11. <https://doi.org/10.1007/s13198-022-01769-0>. UGC LISTED. ISSN: 0975-6809. IF: 3.2
6. R. Pandey and H. Tolani (2022). Crime Patterns in Delhi: A Bayesian Spatio-temporal Assessment. International Journal of System Assurance Engineering and Management. 13(6), pp. 2971-80
7. R. Pandey and H. Tolani (2022). Penalized Splines Model to Estimate time- varying Reproduction Number for Covid -19 in India: A Bayesian Semi-Parametric Approach. Clinical Epidemiology and Global Health. 18, 101176
8. Kim, J., Das, M., Saha, I., Sinha, P., Singh, P., and Das, R. N. (2022). Inter-relationship between homeostasis model assessment of insulin resistance & breast cancer biomarkers, Onkologia i Radioterapia, 16(4), 34-38.
9. Singh, P., and Sharma, R. (2022). Construction of Complete Diallel Crosses Plans using Galois Field. International Journal of Agricultural and Statistical Sciences, 18 (2), 813-820.
10. Dey, S., Nassar, M., Ali, S., Kumar, D., & Raheem, E. (2022). Comparison of Estimation Methods of the Power Generalized Weibull Distribution. Statistica, 82(4), 339–372. <https://doi.org/10.6092/issn.1973-2201/12924>.
11. Zuber Akhter, Ehab M. Almetwally and Christophe Chesneau (2022): On the generalized
12. Bilal distribution: Some properties and estimation under ranked set sampling. Axioms, 11(4), 173.
13. Singh, P., and Kumar, N. (2022). Some New Families of Orthogonal Latin Hypercube Designs with Nine Columns. International Journal of Statistics and Reliability Engineering, 9(3), 347-352.

### **Year: 2021**

1. Chakravarty, S., Grover, G., & Aggarwal, S.(2021).Association of Socioeconomic and Demographic Factors With COVID-19 Related Health Outcomes in SAARC Nations. Statistics and Applications, ISSN:2452-7395.

2. Deo, V. and Grover, V. (2021) A new extension of state-space SIR model to account for underreporting- An application to the COVID-19 transmission in California and Florida. *Results in Physics*, 22113797.
3. Grover, G., Saini, R., Ravi, V. & Varshney, M.K. (2021). Markov Chain Modelling of Persistency for Life Insurance in India. *Stochastic Modeling & Applications*, ISSN:0972-3641.
4. Grover, G., & Aggarwal, S. (2021). A Study Comparing Cost-Effectiveness of Combination Therapy for Preventing Opportunistic Infections Among Human Immunodeficiency Virus-Infected Adults on Antiretroviral Therapy. *Value in Health Regional Issues*, ISSN:2212-1099.
5. Ravi, V., Saini, R., Varshney, M. K. & Grover, G. (2021). Modelling of survival time of life insurance policies in India: a comparative study. *International Journal of System Assurance Engineering and Management*, ISSN:0975-6809.
6. Grover, G., & Magan, R. (2021). Estimation and comparison of poverty line in different states of India by using Quality Adjusted Life year (QALY). *Health Science Journal*, ISSN:1108-7366.
7. Alsubie, A., Akhter, Z., Athar, H., Alam, M., Abd EL-Baset A. Ahmad, Gauss M. Cordeiro & Ahmed Z. Afify (2021). On the Omega Distribution: Some Properties and Estimation. *Mathematics*, MDPI, ISSN:2227-7390.
8. Akhter, Z., MirMostafae, S. M. T. K. & Ormoz. E. (2021). On the order statistics of exponentiated moment exponential distribution and associated inference. *Journal of Statistical Computation and Simulation*, ISSN:1563-5163.
9. Kim, J., Das, R. N., Singh, P., and Lee, Y. (2021). Robust second-order rotatable designs invariably applicable for some lifetime distributions. *Communications for Statistical Applications and Methods (CSAM)*, Vol. 28.
10. Singh, P., Sarin, V., Midha, N. (2021). Mixture designs generated using orthogonal arrays based on pairwise orthogonal Latin squares. *International Journal of Agricultural Statistical Sciences*.
11. Singh, P., Sarin, V., Midha, N. (2021). Mixture designs generated using orthogonal arrays from mutually orthogonal Latin squares. *Statistics and Applications*. Vol. 19, ISSN: 2452-7395.
12. Singh, P. and Kumar, A. (2021). Bayesian D-optimal Designs for Beta Regression Model, *International Journal of Statistics and Reliability Engineering*, 8(1), Vol. 8(1), ISSN(P): 2350-0174; ISSN(O):2456-2378.

13. Singh, P. and Kumar, A. (2021). Bayesian D-optimal Designs for Beta Regression Model. International Journal of Statistics and Reliability Engineering, 8(1), Vol. 8(1), ISSN(P): 2350-0174; ISSN(O):2456-2378.
14. Garg,S., Patro R. K., Behera,S., Tigga N. P. and Pandey,R.(2021).An Overlapping Sliding Window and Combined Features based Emotion Recognition System for EEG Signals. Applied Computing and Informatics, IEEE Access, ISSN: 2634-1964.
15. Pandey,R. and Ali ,D.(2021).Bayesian Analysis of Nakagami Distribution. Journal of Scientific Research, ISSN: 0447-9483.

### **Year: 2020**

1. Grover, G., Chakravorty, Sangeeta, Thakur, A. K. (2020). Estimation of Cure Fraction and Misclassification Probabilities for HIV/AIDS Patients Under ART Using Continuous Time Hidden Markov Model. Statistics and Applications, ISSN:2452-7395.
2. Grover,G., and Deo.V. (2020). Parametric Survival and Multinomial Dirichlet Bayesian Models within Multi-state Setup for Cost Effectiveness Analysis of Two Alternative Chemotherapies for Chronic Lymphocytic Leukaemia Patients, Statistics and Applications, ISSN:2452-7395.
3. Varshney, M. K., Sharma, A., Goel, K., Ravi, V., & Grover, G. (2020). Estimation of transition probabilities for diabetic patients using hidden Markov model. International Journal of System Assurance Engineering and Management, ISSN: 0975-6809.
4. Garg R., Dube M. and Krishna H. (2020). Estimation of parameters and reliability characteristics in Lindley distribution using randomly censored data. Statistics, Optimization & Information Computing, ISSN: 2310-5070..
5. Pushkarna, N., Saran, J. and Verma, K. (2020). Progressively Type-II Right Censored Order Statistics from Hjorth Distribution and Related Inference, Statistics, Optimization & Information Computing, ISSN:2310-5070.
6. Grover, G., & Thakur, A. K. (2020). On Containment Plan Amid COVID-19 in Red Zone Districts of India: Using Clinical Life Table and Cure Fraction Model, Journal of Communicable Diseases, ISSN:0019-5138.
7. Grover, G., Chakravorty, Sangeeta, Thakur, A.K. (2020). Estimation of Cure Fraction and Misclassification Probabilities for HIV/AIDS Patients Under ART Using Continuous Time Hidden Markov Model.Statistics and Applications, ISSN:2452-7395.

8. Grover, G., Vinit, P.K. & Sehgal, V.K. (2020). Estimation of premium cost for HIV/AIDS patients under ART. International Journal of System Assurance Engineering and Management, ISSN:0975-6809.

**Year: 2019**

1. Chaturvedi, A. and R.Bapat ,S. (2019). Multi-stage point estimation of the mean of an inverse Gaussian distribution. Journal of Sequential Analysis.
2. Chaturvedi, A. and R.Bapat ,S. (2019).Sequential minimum risk point estimation of the parameters of an Inverse Gaussian Distribution. American Journal of Mathematical and Management Sciences, ISSN: 0196-6324.
3. Deo, V., and Grover,G.(2019)..A New Approach to Evaluate Quality Adjusted Life Years using Proxy Utility Function-An Application to HIV/AIDS Data. Journal of Communicable Diseases, ISSN: 0019-5138.
4. Grover,G., Das.R.N, and Magan,R.(2019).On the estimation of QALD (Quality Adjusted Life Days) based on expenditure data for Childbirth and Maternity services in India using utility theory. Indian Journal of Economics and Development, ISSN:2277-5412.
5. Thakur, A.K., Grover,G., and Adeleke,K.(2019).Effect of Prognostic Factors on Survival Time of Patients of Cardiovascular Disease using Quantile Regression.Journal of Communicable Diseases, ISSN: 0019-5138.
6. Goel,K., Grover,G., Sharma,A., Bae S.(2019).Multistate Markov model for predicting the natural disease progression of type 2 diabetes based on hemoglobin A1c. Journal of Nephro pharmacology, ISSN: 2345-4202.
7. Grover,G., Sabharwal,A., Kumar,S., Thakur,AK.(2019).On the estimation of misclassification probabilities of chronic kidney disease using continuous time hidden Markov models, Journal of Nephro pharmacology, ISSN:2345-4202.
8. Sabharwal, A., Grover, G., & Kaushik, S.(2019).Testing the difference between bipolar disorder and schizophrenia on the basis of the severity of symptoms with C ( $\alpha$ ) test. Journal of Applied Statistics, ISSN:1360-0532.
9. Sabharwal,A., Grover,G., Kumar,S.(2019).Statistical Significance of Prognostic Factors on The Progression Of Chronic Kidney Disease Through Simulation Study. Journal of Nephro pharmacology, ISSN:2345-4202.

10. Akhter.,Z.; MirMostafae.,S.M.T.K and Athar.,H.(2019).On the moments of order statistics from the standard two-sided power distribution. Journal of Mathematical Modeling, ISSN:2345-394X.
11. Pandey.R., Kumar.J and Kumari,N.,(2019)Bayesian Parameter Estimation of Beta Log Weibull Distribution under Type II Progressive Censoring. Journal of Statistics and Management Systems, ISSN:2169-0014.
12. Chaturvedi A., Kumari T., Kumar N.(2019). Numerical study of robust Bayesian analysis of a generalized inverted family of distributions based on progressive type II right censoring. Communications in Statistics-Simulation and Computation, Print ISSN: 0361-0918 Online ISSN: 1532-4141.
13. Chaturvedi A, Bapat S.R, Joshi,N.(2019).Sequential minimum risk point estimation of the parameters of an Inverse Gaussian Distribution. American Journal of Mathematical and Management Sciences, Print ISSN: 0196-6324 Online ISSN: 2325-8454.

### **Year: 2018**

1. Aggarwal, M.L., Singh, P., Sarin, V. and Goel, R.(2018).Projected mixture designs based on weighing Matrices International Journal of Experimental Design and Process Optimisation, 5(4), 285-300.
2. Aggarwal, M.L., Singh, P., Sarin, V. and Goel, R. (2018). Orthogonally Blocked Mixture Designs for Darroch and Waller Model. International Journal of Agricultural and Statistical Sciences, 14(1), 239-250.
3. Grover, G. and Sharma, A. (2018). the Effect of Reduction of Predictors Affecting the Survival Time of HIV/ AIDS Patients using a Multiple Correlation/ Association Technique. Journal of Communicable Diseases, 50, 15-21.
4. Varshney, M.K. Grover, G., Ravi,V and Thakur, A. K.(2018) .Cure Fraction Model for the Estimation of Long-term Survivors of HIV/AIDS Patients under Antiretroviral Therapy. Journal of Communicable Diseases, 501-10.
5. Mukhopadhyay, N., Chaturvedi, A. and Malhotra, A. (2018). Two-stage procedures for the bounded risk point estimation of the parameter and hazard rate in two families of distributions. Journal of Sequential Analysis, 37 (1), 69-89.
6. Chaturvedi, A. and Malhotra, A. (2018): Estimation of  $P(X>Y)$  for the positive exponential family of distributions. Statistica: 78 (2), 149-167.



7. Chaturvedi, A., Belaghi, A.R. and Malhotra, A. (2018). Preliminary test estimators of the reliability characteristics for the three parameters Burr XII distribution based on records. *International Journal of System Assurance Engineering and Management*. <https://doi.org/10.1007/s13198-018-0710-4>.
8. Chaturvedi, A. and Kumari, T. (2018): Robust Bayesian analysis of generalized inverted family of distributions. *Communications in Statistics-Simulation and Computation* (Taylor & Francis). <https://doi.org/10.1080/03610918.2018.1438619>.
9. Chaturvedi, A. and Kumari, T. (2018): Estimation and testing procedures of the reliability functions of generalized inverted scale family of distributions. *Statistics*: <https://doi.org/10.1080/02331888.2018.1527843>. ISSN:0233-1888.
10. Chaturvedi, A., Kumar, N. and Kumar, K. (2018): Statistical inference for the reliability functions of a family of lifetime distributions based on progressive type II right censoring. *Statistica*, 78 (1), 81-101.
11. Pandey, R. and Kumari, N. (2018). Estimation for ISB p-dim Rayleigh distribution under progressive type-II censored data using different loss functions. *International Journal of Engineering, Science and Mathematics*. 7(1), 467-477.
12. Pandey, R. and Kumari, N. (2018). Bayesian Estimation for ISB p-dim Rayleigh distribution under progressive type-II censored data using Lindley's Approximation. *World Wide Journal of Multidisciplinary* 4(1), 207-211.
13. Pandey, R. and Yadav, K. (2018). On Variance Estimation under Factor Type Imputation using Auxiliary Attribute. *International Journal of Agricultural and Statistical Sciences*, 14(1), pp. 95-101.
14. Pandey, R. (2018). Book review on *Information Geometry and Population Genetics, The Mathematical Structure of the Wright - Fisher Model* by Julian Hofrichter, Jurgen Jost and Tat Dat Tran, Springer (2017) : ISSN 1860-0832 in *Canadian Studies in Population*, 45(1-2), 93-94.
15. Kumari, T., Vachher, M., Bansal, S., Bamezai, R. N.K., and Kumar, B. (2018). Meta-Analysis of Mitochondrial T16189C for Cancer and Type 2 Diabetes risk. *Clinica Chimica Acta*, <https://doi.org/10.1016/j.cca2018.03.041>.
16. Kumari, T. and Kumar, B. (2018). High-mobility group box 1 protein (HMGB1) gene polymorphisms and cancer susceptibility: A comprehensive meta-analysis. *Clinica Chimica Acta*, 483, 170-182.

17. Verma, K., Sarana, J. and Pushkarna, N. (2018). Relationships for moments of generalized order statistics from Erlang-truncated exponential distribution and related inference. *ProbStat Forum*, 11, 91–103.

### **Year: 2017**

1. Swain, P. K., Grover, G., Chakravorty, S., Goel, K., & Singh, V. (2017). Estimation of Number of Involved Lymph Nodes in Breast Cancer Patients using Bayesian Regression Approach. *J. Stat. Appl. Pro. Lett. USA*, 4(1), 17-25.
2. Grover, G., Goel, K. and Seth, D. (2017). Application of Univariate Frailty Models in Modeling Survival Data with a Cured Fraction. *Journal of Applied Quantitative Methods*, Italy, 11(4).
3. Gupta, V. K., & Grover, G. (2017). Multiple imputation for gamma outcome variable using generalized linear model. *Journal of Statistical Computation and Simulation*, 87(10), 1980-1988.
4. Grover, G. & Goel, K. (2017). Estimating the Cure Fraction among Cancer Patients by using Promotion Time Cure Rate Model with Negative Binomial Distribution. *Journal of Applied Quantitative Methods*, Italy, 11(4).
5. Chaturvedi, A. and Vyas, S. (2017). Estimation and testing procedures for the reliability functions of exponentiated distributions under censorings. *Statistica*, 77 (1), 13-31.
6. Chaturvedi, A. and Malhotra, A. (2017). Inference on the parameters and reliability characteristics of three parameter Burr distribution based on records. *Applied Mathematics and Information Science*, 11(3), 1-13.
7. Chaturvedi, A. and Kumari, T. (2017). Robust Bayesian analysis of generalized half logistic distribution. *Statistics, Optimization and Information Computing*, 5, 158-178.
8. Chaturvedi, A. and Nandchahal, S. (2017). Shrinkage estimators of the reliability characteristics of generalized half logistic distribution. *International Journal of Linguistics and Computational Applications*, 1, 29-36.
9. Chaturvedi, A. and Kumari, T. (2017). Estimation and Testing Procedures for the Reliability Functions of a General Class of Distributions. *Communications in Statistics-Theory and Methods*, Vol. 46, No. 22, 11370-11382. ISSN: 0361-926.
10. Chaturvedi, A. and Kumari, T. (2017). Estimation and comparison of the stress-strength models with more than two states under Weibull distribution and type II censoring scheme.

Communications in Statistics-Theory and Methods.  
<https://doi.org/10.1080/03610926.2017.1414264>.

11. Chaturvedi, A. and Malhotra, A. (2017). On the construction of preliminary test estimators of the reliability characteristics for the exponential distribution based on records. American Journal of Mathematical and Management Sciences. DOI:10.1080/01966324.2017.1392269.
12. Chaturvedi, A. and Vyas, S. (2017). Estimation and testing procedures for the reliability functions of three parameter Burr distributions under censorings. Statistica, LXXVII(3), 2017.
13. Chaturvedi, A. and Kumar, N. (2017). Estimation and testing procedures for the reliability functions of the Moore and Bilikam family of lifetime distributions under progressive type-II right censoring. Journal of Combinatorics, Information and System Sciences, 42(1-2), 1-30.
14. Pandey, R. and Kaur, C. (2017). Spatial Analysis of Factors Influencing Birth Patterns in the States of India. Journal of Scientific Research, 9(1), 43-56.
15. Pandey, R. and Yadav, K. (2017). Population Variance Estimation using Factor Type Imputation Method. Statistics in Transition new series, 18(3), 375-392.
16. Pandey, R. and Kumari, N. (2017). Bayesian Estimation for Inverse Size Biased p-Dimensional Rayleigh Distribution. International Journal of Essential Science, 11 (1 & 2), 16-24.
17. Budhraja, V., Thapliyal, P. (2017). Restricted Randomized Two-Level Fractional Factorial Designs using Gray Code, International Journal of Computer & Mathematical Sciences, 6(7), 1-7.

### **Year: 2016**

1. Saran, J. and Nain, K. (2016). Recurrence relations for marginal and joint moment generating functions of generalized order statistics from a new class of Pareto distributions. To appear in Journal of Statistical Theory and Applications, 15.
2. Saran, J., Pushkarna, N. and Tiwari, R. (2016). Relationships for moments of generalized order statistics from a general class of distributions. ProbStat Forum, 09, 80-87.
3. Jha, M.K., Singh, P. and Priyadarshini, G. (2016). Cross-over Designs for a model with self and mixed carryover effects. ProbStat Forum, 9, 35-43.

4. Singh, P., Thapliyal, P and Budhraj, V. (2016). A Technique to Construct Linear Trend Free Fractional Design using some linear codes. *International Journal of Statistics and Mathematics*, 3(1), 73-81.
5. Singh, P., Thapliyal, P. and Budhraj, V. (2016). Construction of Linear Trend Free Fractional Factorial Designs using Linear Codes. *International Journal of Agricultural and Statistical Sciences*, 12(1), 13-19.
6. Singh, P., Jha, M.K. and Priyadarshini, G. (2016). Nested Crossover Designs. *Model Assisted Statistics and Application*, 11, 247–259.
7. Singh, P., Jha, M.K. and Priyadarshini, G. (2016). Partially Balanced Cross-Over Designs for Consumer trials. *Sri Lankan Journal of Applied Statistics*, 17(2), 71-85.
8. Swain, P. K., Grover, G., and Goel, K. (2016). Mixture and Non-Mixture Cure fraction Models based on Generalized Gompertz Distribution under Bayesian approach. *Tatra Mountains Mathematical Publications, Slovakia*, 66, 121-135.
9. Varshney, M.K. Ravi, V., Grover, G., Godpayle, A.K. & Chander S.(2016). Survival Pattern of AIDS Patients by Different Types of TB and Associated Prognostic Factors. *Demography India*, Vol.45, Issue:1&2,pp:131-142, ISSN:0970-454X.
10. Gupta, V. K., Grover, G., and Arora, M. (2016). Trend in BMI z-score among Private Schools' Students in Delhi using Multiple Imputation for Growth Curve Model. *Epidemiology, Biostatistics and Public Health*, 13(2), e11836(1-8).
11. Grover, G., Gupta, V. K., and Swain, P.K. (2016). Estimation of Sub-distribution Hazard ratio of HIV/AIDS Patients for Interval Censored Data with Loss to follow up as a Competing Risk. *J. Commun. Dis*, 48(3), 22-28.
12. Swain, P.K. and Grover, G. (2016). Determination of Predictors Associated with HIV/AIDS Patients on ART Using Accelerated Failure Time Model for Interval Censored Survival Data. *American Journal of Biostatistics (USA)*, 61, 12-19.
13. Swain, P.K. and Grover, G. (2016). Accelerated failure time shared frailty models: Application to HIV/AIDS patients on anti retroviral therapy in Delhi. *Turkiye Klinikleri Journal of Biostatistics*. 8(1) pp. 13:20
14. Chaturvedi, A and Nandchahal, S. (2016). Shrinkage estimators of the reliability characteristics of a family of lifetime distributions. *Statistica*, LXXVI (1), 1-26.
15. Pandey, R. and Chaturvedi, A. (2016). Bayesian inference for stat space model with panel data. *Statistics in Transition New Series*, 17(2), 211-220.
16. Pandey, R., Yadav, K. and N. S. Thakur (2016). Adapted Factor-Type Imputation Strategies. *Journal of Scientific Research*, 8(3), 321-339.

17. Pandey, R., Yadav, K. (2016). An Alternative Class of Exponential Ratio-Product Type Mean Imputation Using Auxiliary Information. *Journal of Applied Probability and Statistics*, 11(2), 125-141.
18. Pandey, R. and Yadav, K. (2016). Mean estimation under Imputation based on Two-phase Sampling Design using an Auxiliary Variable. *Pakistan Journal of Statistics and Operation Research*, 12(4), 639-658.
19. Pandey, R and Kumari, N. (2016). A New Life Time Distribution for Modeling Monotonic Decreasing Survival Patterns. *Journal of Reliability and Statistical Studies*, 9(2), 53-70.

### **Year: 2015**

1. Saran, J., Pushkarna, N. and Tiwari, R. (2015). Moment properties of generalized order statistics from Lindley distribution. *Journal of Statistics Applications & Probability*, 4(3), 429-434.
2. Pushkarna, N., Saran, J. and Tiwari, R. (2015). L-moments and TL-moments estimation and relationships for moments of progressive type-II right censored order statistics from Frechet distribution. *ProbStat Forum*, 08, 112-122.
3. Saran, J., Pushkarna, N. and Tiwari, R. (2015). Recurrence relations for single and product moments of dual generalized order statistics from a general class of distributions. *Journal of Statistical Theory and Applications*, 14(2), 123-130.
4. Saran, J. and Nain, K. (2015). Recurrence relations for moment generating functions of generalized order statistics from some specific continuous distributions. *J. Kerala Statist. Assoc.*, 26, 01-23.
5. Jha, M.K., Singh, P. and Priyadarshini, G. (2015). Cross-over Designs for Factorial Experiments. *International Journal of Agricultural and Statistical Sciences*, 11 (2), 349-355.
6. Singh, P., Jha, M.K. and Priyadarshini, G. (2015). Constructions of Partially Balanced Crossover Designs Based on Two and Higher Order Association Schemes. *Journal of Statistical Theory and Practice*, 9 (4), 778-796.
7. Grover, G., Ravi, V. and Swain, P.K. (2015). On the assessment of various factors effecting the improvement in CD4 count of aids patients undergoing antiretroviral therapy using generalized Poisson regression. *Journal of applied statistics*, 42(6), 1291-1305.

8. Mondal, S.K., Das, R.N., Kundu, S., Kim, J., Gurprit, G. and Ansari, S.A. (2015). Mean variance relationships of Genome size and GC content. *Annual research & review in Biology*, 7(4), 206-221.
9. Grover, G., Swain, P.K., Deo, V. and Varshney, M.K. (2015). A joint modelling approach to assess the impact of CD4 cell count on the risk of loss to follow up in HIV/AIDS patients on Antiretroviral therapy. *International journal of statistics and applications*, 5(3), 99-108.
10. Grover, G., Sabharwal, A. and Kaushik, S. (2015). Estimating length of stay and duration of illness for Psychiatric using multivariate modelling. *American journal of mathematics and statistics*, 5(6), 329-353.
11. Chaturvedi, A., Kang, S.B, and Pathak, A. (2015). Estimation and testing procedures for the reliability functions of generalized half logistic distribution. *Journal of the Korean Statistical Society*, 45, 2134-328, ISSN: 1226-3192.
12. Chaturvedi, A. and Kumari, T. (2015). Estimation and testing procedures for the reliability functions of a family of lifetime distributions. [interstat.statjournals.net/YEAR/2015/abstracts/1306001.php](http://interstat.statjournals.net/YEAR/2015/abstracts/1306001.php).
13. Chaturvedi, A. and Pathak, A. (2015). Bayesian estimation procedures for three-parameter exponentiated-Weibull distribution under squared-error loss function and type II censoring. *World Engineering and Applied Sciences Journal*, 6 (1), 45-58.
14. Pandey, R., Thakur, N.S. and Yadav, K. (2015). Separate Regression Type Imputation Methods to Estimate Population Mean. *International Journal of Computer and Mathematical Sciences*, 4, 198-207.
15. Pandey, R. and Yadav, N. (2015). Fertility Decline: A Statistical Demographic Review of Parsi Community. *Bulletin of Mathematical and Statistical Research*, 3(4), 104-122.
16. Pandey, R., Thakur, N.S. and Yadav, K. (2015). Estimation of Population Mean using Exponential Ratio Type Imputation Method under Survey Non-response. *Journal of Indian Statistical Society*, 53(2), 89-107.
17. Khuman, S., Raina, N., Pandey, R. and Rao, K.S. (2015). Fuelwood assessment at the micro-watershed level: a case study in Garhwal Himalaya, India. *Chinese Journal of Population Resources and Environment*, 177-186.
18. Pandey, R. (2015). Posterior Analysis of State Space Model with Spherical Symmetry. *Journal of Probability and Statistics*, 2015, 1-7.
19. Pandey, R. and Kaur, C. (2015). Modelling fertility: an application of count regression models. *Chinese Journal of Population Resources and Environment*, 2015, 349-357.

20. Pandey, R., Thakur, N.S. and Yadav, K. (2015). Combined Exponential Type Estimators of Population Mean in Stratified Random Sampling. Proceedings of International conference on Recent Advances in Mathematics, Statistics and Computer Science, World Scientific. 2015.
21. Kumar, K., Krishna, H. and Garg, R. (2015). Estimation of  $P(Y < X)$  in Lindley distribution using progressively first failure censoring. International Journal of System Assurance Engineering and Management, 6(3), 330-341.
22. Krishna H., Vivekanand and Kumar, K. (2015). Estimation in Maxwell distribution with randomly censored data. Journal of Statistical Computation and Simulation. 85(17), 3560-3578.

### **Year: 2014**

1. Athar, H., Akhter, Z. and Saran, J. (2014). Moments of progressive type-II right censored order statistics from Lindley distribution. Statistics Research Letters, 3(1), 1-6.
2. 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.
3. 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(2), 162-174.
4. Saran, J., Pushkarna, N. and Tiwari, R. (2014). L-moments and TL-moments estimation and recurrence relations for higher moments of order statistics from Lindley distribution. J. Kerala Statist. Association, 25, 1-15.
5. 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(3), 85-93.
6. 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(2), 11-21.
7. 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.
8. Singh, P., Budhraj, V. and Thapliyal, P. (2014). Trend free orthogonal arrays using some linear codes, IJSER, 5(7), 1512-1520.

9. Grover, G. and Ravi, V. (2014). On the estimation of expected survival time of AIDS patients undergoing Antiretroviral therapy using censored generalized Poisson regression model. *Turkiye Klinikleri J Biostat (Turkey)*, 6(1), 24-32.
10. Grover, G., Swain, P.K. and Ravi, V. (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), 7-16.
11. Grover, G., Sabharwal, A., and Mittal, J. (2014). Application of Multivariate and Bivariate Normal Distributions to Estimate Duration of Diabetes. *International Journal of Statistics and Applications (USA)*, 4(1), 46-57.
12. Grover, G., Sabharwal, A., and Mittal, J. (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), 50-58.
13. Grover, G. and Seth, D. (2014). Application of frailty models on advance liver disease using gamma as frailty distribution. *Statistics Research Letters*, 3, 42-50.
14. Grover, G., Gadpayle, A.K., Varshney, M.K. and Ravi, V. (2014). A follow up study on survival trend of AIDS patients reported at ART centre in Delhi & variation according to age, sex, stages & mode of transmissions. *JK Science: Journal of Medical Education & Research*, 16(2), 76-82.
15. Grover, G. and Gupta, V.K. (2014), Multiple imputation of censored survival data in the presence of missing covariates using restricted mean survival time, *Journal of Applied Statistics (USA)*, 42(4), 817-827.
16. Grover, G. Seth, D., Ravi, V. and Swain, P.K. (2014) A Multistate Markov Model for the Progression of Liver Cirrhosis in the Presence of Various Prognostic Factors, *Chilean Journal of Statistics(Chile)*, 5(2),pp: 15-27. ISSN:0718-7920.
17. Chaturvedi, A. and Pathak, A. (2014). Estimating the reliability function for a family of exponentiated distributions. *Journal of Probability and Statistics*, 2014, 1-10.
18. Alam, M.W., Chaturvedi, A. and Kumar, A. (2014). Estimation of survival function under type II censoring using a generalized family approach. *International Journal of Agricultural and Statistical Sciences*, 10(1), 17-19.
19. Alam, W., Chaturvedi, A., Singh, K.N., Kumar, A., Paul, A.K., Paul, R.K. and Sinha, K. (2014). Maximum likelihood and uniformly minimum variance unbiased estimation of  $P(Y<X)$  for Gompertz distribution. *International Journal of Agricultural and Statistical Sciences*, 10(2), 267-274.



20. Sharma, V. and Chaturvedi, A. (2014). Bayesian life test planning for a family of inverse distributions: Some exact and approximate solutions. *International Journal of Agricultural and Statistical Sciences*, 10(2), 291-295.
21. Pathak, A. and Chaturvedi, A. (2014). Estimation of the reliability function for four parameter exponentiated generalized Lomax distribution. *International Journal of Scientific & Engineering Research*, 5(1), 1171-1180.
22. Chaturvedi, A., Tiwari, N. and Bhatnagar R.K. (2014). Generalized family of multistep utility functions for adoption in UNDP's human development index. *Arthshastra Indian Journal of Economics & Research*, 3(6), 7-19.
23. Pathak, A. and Chaturvedi, A. (2014). Estimation of the reliability function for two-parameter exponentiated Rayleigh or Burr type X distribution. *Statistics, Optimization and Information Computing*, 2, 305-322.
24. Pandey, R. (2014). Shrinkage estimation of reliability function for some lifetime distribution. *American Journal of Computational and Applied Mathematics*, 4(3): 92-96.
25. Tomer, S. and Kumar, A. (2014). Traditional Moments and L-Moments Estimation for the Transmuted Exponentiated Lomax Distribution, *Anusandhan Anveshika*, 4, 121-130.
26. Kumar, K. and Garg, R. (2014). Estimation of the parameters of randomly censored generalized inverted Rayleigh distribution, *International Journal of Agricultural and Statistical Sciences*, 10(1), 147-155.

### **Year: 2013**

1. 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(2), 165-176.
2. 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(3), 306-320.
3. 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.
4. Pushkarna, N., Saran, J. and Tiwari, R. (2013). Recurrence relations for higher moments of order statistics from doubly truncated Burr distribution. *STATISTICA*, 73(2), 253-265.

5. Saran, J. and Kumari, T. (2013). Recurrence relations for marginal and joint moment generating functions of upper k-record values from Gompertz distribution. *ProbStat Forum*, 06, 96-106.
6. Saran, J. and Nain, K. (2013). Combinatorial approach to M/M/1 queues using hypergeometric functions. *International Mathematical Forum*, 8(10), 463-472.
7. 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*, 3(1), 69-73.
8. Grover, G., Sabharwal, A., and Mittal, J. (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)*, 2, 209-219.
9. Grover, G., Sabharwal, A., and Mittal, J. (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), 89-101.
10. Grover, G, Gadpayle, A.K., Swain, P.K., and Deka, B. (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)*,2, 144-151.
11. Grover, G., Sreenivas, V., Khanna, S., and Seth, D. (2013). Multi state Markov model: An application to liver cirrhosis. *Statistics in Transition-new series,(Poland)*; 14(3), 429-442.
12. Grover, G., Ravi, V. and Varshney, M.K. (2013). On the estimation of Average HIV population using various Bayesian techniques, *Applied Mathematics (USA)*, 3(3), 98-106.
13. Grover, G. Gadpayle, A.K., Ravi, V. and Varshney, M.K. (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), 01-09.
14. Grover, G. and Deka, B. (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), 538-541
15. Grover, G. and Deka, B. (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), 534-537
16. Grover, G., Sreenivas, V., Khanna, S. and Seth, D. (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), 113-122.
17. Grover, G., Das, R., Swain, P.K. and Deka, B. (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), 213-219.
  18. Chaturvedi, A. and Ghosh, S. (2013). Estimating the reliability function for a family of inverse distributions. *Journal of Probability and Statistical Science*, 11(1), 59-78.
  19. Chaturvedi, A., Alam M.W. and Chauhan, K. (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*, 51(2), 313-328.
  20. Chaturvedi, A. and Ghosh, S. (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.
  21. Pathak, A. and Chaturvedi, A. (2013). Bayesian estimation procedures for exponentiated family of lifetime distributions under squared error and entropy losses. *International Journal of Mathematical Analysis*.
  22. 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.
  23. Umrawl, A.K. (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.

### **Year: 2012**

1. 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(2), 231-238.

2. 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.
3. 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. *Jahangirnagar University Journal of Statistical Studies*, 31, 35-41.
4. Saran, J. and Singh, S. (2012). On the expected values of order statistics and of the range from a discrete uniform distribution. *ANU Journal of Physical Sciences*, 4(1), 1-14.
5. 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(4), 193-201.
6. 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.
7. Saran, J. and Pandey, V. (2012). Recurrence relations for moments of progressively type-II right censored order statistics from half logistic distribution. *Journal of Statistical Theory and Applications*, 11(1), 87-96.
8. 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.
9. 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*, 47(5), 1003-1021.
10. Grover, G., Gadpayle, A.K., Sabharwal, A. (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), 615-624.
11. Grover, G., and Sabharwal, A. (2012). A parametric approach to estimate survival time of diabetic nephropathy with left truncated and right censored data. *International Journal of Probability and Statistics*, 1(1), 128-137.
12. 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.
13. Chaturvedi, A. and Pathak, A. (2012). Estimation of the reliability function for exponentiated Weibull distribution. *Journal of Statistics and Applications*, 7(3-4), 113-120.

14. Khuman, Y.S.C., Pandey, R. and Rao, K. S. (2012). Micro-watershed level population based fuelwood consumption dynamics: Implications of seasonal vs. annual models for sustainable energy resource planning. *Renewable and Sustainable Energy Reviews* 16(8), 6142-6148.