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## A.     Educational Qualifications:

1. Ph. D., Mathematics from CCS University, Meerut, India (2010).
   Title of Ph.D. Thesis: "*Reliability Modeling and Performance Evaluation for Complex Systems*"
2. Master of Philosophy from CCS University, Meerut, India (1992) with First Division.
   The title of M. Phil. Thesis: "*Room Squares*"
3. Master of Science (M. Sc., Mathematics): from CCS University, Meerut, India (1989) with First Division.

## B.     Publications:

### International Journals:
### Publications: Year 2024.

[1]    Suresh Kumar Sahani, Santosh Kumar Karna, Dhiraj Kumar Sharma, Binod Kumar Sah, Kameshwar Sahani, Vijay Vir Singh, Information in The African Markets Bolstering Conventional Indices; A Review of The Theory and Empirical Evidences, Educational Administration: Theory and Practice, Vol. 30(5), 6703-6710.

[2]     Umesh Chand, V. V. Singh, Ameer Hassan Abdullahi, Rabiu Hamisu Kankarofi, S.K. Sahani, Stochastic analysis of repairable system comprised two subsystems with k-out-of-n: G, operational policy and copula repair approach, Accepted for publication, Jordan Journal of Mathematics & Statistics. July 2024.

[3]     Priyavada, V. V. Singh, Modified Particle Swarm Optimization incorporated an integrated approach for solution of Quadratic Programming Problems using Penalty Method, accepted for publication Dec. 2023and will publish in JNANABHA, Vol.54(1) (June 2024).

[4]    Sujal Mishra, Suresh Kumar Sahani, Kameshwar Sahani, Binod Kumar Sah, Vijay Vir Singh, Enrollment of vector in cardiology and study of Cardiac Cadence, Asian Journal of Science, Technology, Engineering, and Art, Vol. 2(1), pp.1-14,2023.

[5]    Suresh Kumar Sahani, Vijay Vir Singh, Dilip Kumar Rawal, Deepika, Krishan Kumar Garg, Fixed Point and Common Fixed Point Theorems for Generalized Weak Contraction Mappings of Metric Space, Pakistan Journal of Life and Social Sciences, Vol 21(1), pp. 2691-2697, 2024.

[6]     Suresh Kumar Sahani, Vijay Vir Singh, Krishnapal Singh Sisodia, Kusum Sharma, Common fixed-point theorem for commuting maps on a metric space, MATHEMATICAL

MODELS IN ENGINEERING, Accepted for publication, 2024.

**Publications: Year 2023.**

[7]     Priyavada, V. V. Singh, A Fuzzy Logic-Based Approach to Nonlinear Optimisation Problems Involving Linear Approximation Relationships. Tuijin Jishu/Journal of Propulsion Technology, ISSN: 1001-4055 Vol. 44 No. 5 (2023).

[8]      S.K. Sahani, C. Yadav, K. Sahani, V.V. Singh, Constructing of Precise Method to Control Non-Linear Systems Employing Special Functions and Machine Learning, Communications on Applied Nonlinear Analysis, Vol. 30, No. 2, pp. 1-14, (2023).

[9]      V. V. Singh, Ibrahim Yusuf, Abdullahi Sanusi, Hamisu Ayagi, Reliability Assessment of Condenser Water Pump System Concept of Multi-Failure and Multi-Repair Approach, Accepted for publication in a Chapter on Edited Book on Modelling and Computational Intelligence for Quality and Reliability Assurance, Elsevier publisher 2023.

[10]     P. K. Poonia, V. V. Singh, Stochastic analysis of delayed reporting of faults in a computer network using copula distribution, Int. J. of Quality Engineering and Technology, Inderscience, Vol. 9, No. 2, pp. 161-182, 2023.

[11]    Dhruv Raghav, Shakeeludeen, S. K Sahani, V. V. Singh, Performance Assessment of complex repairable system with k-out-of-n: G operational scheme and copula repair approach, Journal of Industrial Engineering International. Vol. 18. No. 3, pp. 35-49, 10.30495/JIEI.2023.1953669.1210.

[12]     Hamisu Ismial Ayagi, V.V. Singh, Wan Zhong, Performance Assessment of k operational state system with k-out-of-n: G working scheme with implementing copula, International Journal of Reliability Quality and Safety Engineering, Vol. 30, No. 2 (2023).

**Publications: Year 2022.**

[13]     V. V. Singh, Abdul Kareem Lado, Sudhansu. S. Maiti, Performance assessment of complex system under the k-out-of- n: G type configuration with k consecutive degraded states through copula repair approach. International Journal of Quality Reliability and Safety Engineering, Vol 29(2), pp. 1-29, 2022. DOI: 10.1142/S0218539321500479.

[14]     V. V. Singh, D. K. Rawal, S. K Sahani, Abbas Bin Jibril, Reliability Assessment of Multi-Computer System Consisting n clients and the k-out-of- n: G operation scheme with Copula Repair Policy, Life Cycle Reliability and safety Engineering, Vol. 11 (2), pp. 163-175. 2022, Springer Publisher.

[15]     Umesh Chand, Rovin Kumar, D. K. Rawal, V. V. Singh, Stochastic analysis of complex repairable system comprises two subsystems in series configuration via multi repair strategy, Life Cycle Reliability and Safety Engineering, Springer Journal 11, pp. 323-335, 2022.

[16]     Monika Gahlot, Indukala Tripathi, V. V. Singh, Performance Assessment of complex repairable system comprising two subsystems in series configuration using copula repair strategy, International Journal of Mathematics Trend and Technology, Vol. 61(6), pp. 133- 152, 2022.

[17]     V. V. Singh, Ameer Hassan Abdullahi, P. K. Poonia, Stochastic analysis of complex

system comprises two systems in series via k-out-of-n: G configuration and copula repair tactic, Journal of Reliability and Statistical Studies, Under review, 2022.

[18] V. V. Singh, P. K. Poonia, Anu Sirohi, Cost analysis of two repairable k-out-of-n systems in series with controllers employing copula distribution. Journal of Optimizations in industrial engineering. Vol. 15(1), pp. 121-130, 2022. Scopus indexed, ISSN: 24233935.Impact score: 0.76

**Publications: Year 2021.**

[19] Chiwa, Musa Dalah, N P Singh and V. V. Singh, Assessment of HIV Stigma and Discrimination in North Eastern, Nigeria, [Through control charts], Journal of Pure and Applied Mathematics. Vol. 5(2), pp. 1-6, 2021. ISSN:2752-8081.

[20] [ Indrani Mukherjee, Sudhansu S. Maiti, and Vijay Vir Singh, Study on estimators of the PDF and CDF of the one parameter polynomial exponential distribution, Communications in Statistics, Vol. 52, No. 1, pp.104–120. 2023, ISSN:1532-415X, 03610926. Impact factor: 0.86. doi:10.1080/03610926.2021.1910302

[21] V. V. Singh, P. K. Poonia, Umar Jubrin Labran, Ibrahim Abdullahi, Probabilistic analysis of a multi-state warm standby k-out-of-n: G; system in a series configuration using copula Linguists. Reliability Theory & Applications, Vol. 16(2), pp.22-39, 2021.ISSN: 2326- 9006

[22] Abbas Jibril, V. Singh, D. K Rawal, Probabilistic Assessment of Complex system consisting three subsystems multi failure threats and copula repair approach, International Journal of Quality Reliability and Management, Emerald. Vol. 40 No. 1, pp. 83-102, 2021.

[23] V. V. Singh, P. K. Poonia, D. K. Rawal, Reliability analysis of repairable network system of three computer labs connected with a server under 2- out- of- 3: G configuration", Published, May 2020, Life Cycle Reliability and Safety Engineering. Vol. 10 (1), pp. 19-29, 2021. (DOI: 10.1007/s41872-020-00129-w) Springer Journal. Journal. ISSN: 2520-1360.

[24] V. V. Singh, Monika Gahlot, Reliability Analysis of (N) Clients System Under Star Topology and Copula Linguistic Approach. International Journal of Computational Systems Engineering, Inderscience Journal, Vol. 6(3), pp 123-133, 2021.ISSN 2046-3405.

[25] Dhruv Raghav, D. K. Rawal, Ibrahim Yusuf, Rabiu Hamisu Konkoffi, V. V. Singh, Reliability Prediction of Distributed System with Homogeneity in Software and Server Subject to Different Repair Policies Using Joint Probability Distribution via Copula Approach. Reliability: & Applications, Vol.16 (1), pp. 217-230, 2021. Scopus Indexed Journal. ISSN 1932-2321

[26] V. V. Singh, Abubakar Idris Mohammad, Kabiru Hamisu Ibrahim, Ibrahim Yusuf, Performance assessment of complex repairable system with n-identical units under (k-out-of- n: G) scheme and copula linguistic repair approach. International Journal of Quality Reliability and Management. Vol. 39(2), pp. 367-386. 2021. Emerald. Impact factor: 2.77. ISSN:0265671X.

[27] Dhruv Raghav, P. K. Poonia, V. V. Singh, Probabilistic analysis of complex repairable system involving two subsystems in a series arrangement with (k- out- of- n): G operation Scheme and copula repair approach, Reliability Theory & Applications, Vol. 16(2),

pp.21-39, 2021.ISSN 1932-2321

**Publications: Year 2020.**

[28]  Musa Chiwa Dalah, V. V. Singh, Ibrahim Abdullahi, A study HIV/AIDS trend in Yobe state for the prescribed period (1999 – 2019). International Journal of Statistics and applications. Vol. 10, Issue 1, pp. 1-10,2020.

[29]  A. A. Suleiman, V. V. Singh, Auwalu. Ibrahim, U.A. Abdullahi, S.A. Suleiman, Determination of the Best Fitted Probability Distribution for Groundwater Data in Gwale Area, North-Western Nigeria. Annals on Optimizations Theory and Applications, Vol. 3 issue 1, pp. 36-46. 2020, Online: ISSN:2588-5995.

[30]  Pratap Kumar, Kabiru. Ibrahim, M. I. Abubakar, V. V. Singh, "Probabilistic assessment of complex system with two subsystems in series arrangement with multi types failure and two types of repairs using copula". Strategic System Assurance and Business Analytics. Book Chapter pp:11-26, 2020, Springer Publisher. ISBN-13. 978-9811536465

[31]  Monika Gahlot, V. V. Singh, H. I. Ayagi, Ibrahim Abdullahi, "Stochastic Analysis of a two units' complex repairable system with Switch and Human failure using Copula Approach", Life Cycle Reliability and Safety Engineering. Vol. 9(1), pp. 1-11, 2020.ISSN: 2520-1360.

[32]  V. V. Singh, P. K. Poonia, and Ameer Hassan Abdullahi "Performance analysis of a complex repairable system with two subsystems in series configuration with an imperfect switch". Journal of Mathematics & Computational Science. (JMCS). Vol. 10(2). pp. 359-383, 2020. Scopus Indexed Journal. ISSN: 2008-949X

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[35]  Ibrahim Yusuf, Abdul kareem Lado Ismail, V. V. Singh, U. A. Ali, Nasir Ahmad Sufi, Performance Analysis of Multi-computer System Consisting of Three Subsystems in Series Configuration Using Copula Repair Policy, SN Computer Science (2020) Springer Journal, Vol. 1 (5) pp 1-11, 2020. ISSN 2661-8907

[36]  Dhruv Raghav, P. K. Poonia, Monika Gahlot, V. V. Singh, Hamisu, I, Ayagi, Ameer. H.
[37]  Abdullahi, Probabilistic analysis of a system consisting of two subsystems in the series configuration under copula repair approach. Journal of Korean Mathematical Educational Society: Series B Pure and Applied Mathematics, Vol. 27(3), pp. 135- 155, 2020. ISSN 1226-0657.

[38]  V. V. Singh, Yusuf Ibrahim Gwanda, Replenishment Decision for Ameliorating Inventory with Time Dependent Demand and Partial Backlogging Rate. International Journal of Mathematics and Operation Research. Vol. 46, No.4. pp 571-584, 2020. DOI: 10.1504/IJOR.2020.10034078 Scopus Indexed Journal.

[39]  V. V. Singh, Abdul Kareem Lado, Ibrahim, Yusuf, Ameer Hassan Abdullahi, Probabilistic Assessment of Computer-Based Test (CBT) Network System Using Copula Linguistic Approach. Journal of Reliability and Statistical Studies. Vol. 13 Issue 2, pp. 401- 428, 2020. River publisher Russia. ISSN 2229-5666

**Publications: Year 2019.**

[40]  V. V. Singh, Abdul Kareem Lado, Cost Assessment of complex repairable system consisting two subsystems in Series configuration using Gumbel Hougaard family copula, *International Journal of Quality Reliability and Management,* Vol. 36(10), pp.1683-1698, 2019. (Scopus Indexed Journal). Impact factor: 2.77. ISSN:0265671X.

[41]  V. V. Singh, P. K. Poonia, Probabilistic assessment of two unit's parallel system with correlated lifetime under inspection using regenerative point technique, International Journal of Reliability, Risk& Safety, Theory and applications. Vol. 2(1), pp 5-18, 2019. ISSN.2676- 3346.

[42]  Babagana Modu, V. V. Singh, D. K. Rawal, "Performance modeling of a System operates 2-out-of 3: G."  35th Annual UK Performance Engineering Workshop (UKPEW'2019), pp, 55-70.

[43]  V. V. Singh, M. I. Abubaker "Performance assessment of African textile manufacturers, LTD, in Kano state, Nigeria, through Multi failure and repair using copula. Operation Research and Decisions. Vol. 26, issue 4, pp. 1-18, 2019.ISSN.  2391-6060.

[44]  Chiwa, Musa Dalah, V. V. Singh, M. I. Abubakar, Abdalla E. A. Mohamad, A statistical survey on awareness and knowledge of sexually transmitted infections [STIS] in North-Eastern Nigeria. Journal of Statistical and Econometric Methods. Vol 8. Issue 2, pp. 27-36. 2019.

[45]  Umar Yusuf Madaki, V. V. Singh, Musa Dalah Chiwa, Assessment of Diabetic Patients among Adults in Maiduguri, using Multivariate Discriminant Model. Biostatistics and Biometrics Open Acc. J. UK, Vol. 9 Issue 1, pp, 1-8. UK. 2019. . ISSN: 2573-2633.

[46]  Yusuf Gwanda, V. V. Singh and Adamu Nuhu Beri, Optimal Production Model for Inventory Items with Verhulst's Demand and Time-Dependent Amelioration Rate. Palestine Journal of Mathematics Vol 8(2), pp.418-424,.2019. ISSN: 2219-5688.

**Publications: Year 2018.**

[47]  V. V. Singh, Hamishu. H. Ayagi, "Stochastic analysis of a complex system under preemptive resume repair policy using Gumbel- Hougaard family copula," *International Journal of Mathematics and Operation Research (IJMOR).* Vol 12 Issue 2, pp 273-291, 2018.ISSN:1757-5869. (Scopus Indexed Journal)

[48]  Abdul Kareem Lado, V. V. Singh, Kabiru H. Ismail, Yusuf Ibrahim, "Performance and cost assessment of repairable complex system with two subsystems connected in series configuration" International Journal of Reliability and Applications. Vol. 19 No. 1. pp. 27-42, 2018. ISSN: 1598-0073.

[49]  Monika Gahlot, V. V. Singh, H. Ismail Ayagi& C.K. Goel, "Performance assessment of repairable system in series configuration under different types of failure and repair policies using Copula Linguistics", International Journal of Reliability and Safety. Vol.12 Issue 4 pp.348-374. 2018. (Scopus Indexed Journal). 1479-3903. ISSN (print): 0218-5393 | ISSN (online): 1793-6446.Impcat score 0.56

[50]  V. V. Singh and Jyoti Gulati, D. K. Rawal, "Performance Assessment of two unit's redundant system under different failure and repair policies using Copula." International Journal of Reliability and Applications, Vol 19, Issue 2, pp.114-129, 2018. ISSN. 1598-0073

[51]  Badamasi Abba & V. V. Singh, New Odd Generalized Exponential-Exponential Distribution: Its Properties and Application", Biostatistics and Biometrics Open Acc. J.

6(3) pp.1-6. 2018. ISSN: 2573-2633. Impact factor 1.270.

[52] Chiwa, Musa Dalah, V. V. Singh & Abdalla Eltom Abdalla Mohamad, "Statistical survey on awareness of Hiv/Aids and its impact on economic development in northern Nigeria during the period 2010 - 2015. Journal of Statistical and Econometric Methods. Vol.7 Issue 3. pp 35-62, 2018. ISSN: 2241-0376 (Online)

[53] Chiwa Musa Dalah, V, V, Singh, "A Study towards Awareness and Corrective Measures of HIV/AIDS in North-Western Part of Nigeria through Statistical Assessment" Global Journal of Reproductive Medicine, Vol. 5 Issue 3 pp 1- 8, 2018. ISSN2775-8594. Doi:10.19080/GJORM.2018.555663

[54] **Publications Year 2017.**

[55] V. V. Singh, Hamishu, H. I. Ayagi, "Study of Reliability measures of a system consisting of two subsystems in the series configuration using copula." 'Palestine *Journal of Mathematics*, Vol 6. Special Issue II pp 102-111, 2017. ISSN: 2219-5688. (Scopus Indexed Journal)

[56] V. V. Singh and Kabiru H. Ibrahim, Abdul Kareem Lado, Reliability assessment of complex system consisting two subsystems connected in series configuration using Gumbel- Hougaard family copula distribution. Journal of Applied Mathematics and Bioinformatics, vol. 7, Issue 2, pp. 1-17, 2017. ISSN: 1792-6939.

[57] Chiwa Musa Dalah, V.V. Singh, Survey and Assessment Report of HIV/AIDS Awareness of in North-Eastern Nigeria. International Journals of Advanced Research in Computer Science and Software Engineering, ISSN: 2277-128X (Volume-7, Issue-11) pp 105-112. 2017.

**Publications Year 2016.**

[58] Jyoti Gulati, V. V. Singh, Dilip Kumar Rawal & C. K. Goel, "Performance Analysis of Complex system in the series configuration under different failure and repair discipline using Gumbel-Hougaard family Copula". '*International Journal of Reliability, Quality, and Safety Engineering*' Vol. 23. Issue 2, pp 1- 21, 2016. ISSN: 1793-6446. Impact score: 0.92

**Publications Year 2015.**

[59] V. V. Singh and N. P. Singh, "Performance Analysis of Three Unit Redundant System with Switch and Human Failure," *Mathematics in Engineering, Science, and Aerospace (MESA),* vol. 6, No. 2, pp. 295- 308, 2015. CSP, Cambridge, UK; I&S - Florida, USA, Scopus Indexing. ISSN: 2041-3165.

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[61] V. V. Singh and D. K. Rawal, "Stochastic Analysis of n- Unit Plant with Multidimensional Failure and Under Different Repair Policy Using Copula," *Journal of Reliability and Statistics Studies*, Vol. 6(2), pp 114- 133, 2015. ISSN: 2229-5666. Global, impact factor: 0.853

[62] V. V. Singh, Yusuf Gwanda, Rajesh Prasad, Reliability Analysis of Yobe State University Computer Centre using LRU Algorithm, International Journal of Mathematical, Computational Sciences, Vol. 9, No: 11, pp 701-707. 2015. ISSN: 1307-6892.

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[64]    V. V. Singh, Jyoti Gulati, ICEECE- 2015. International Conference on *Energy Environmental and Chemical Engineering* held in Bangkok during 28-29 June 2015. Funded by TET fund, Nigeria. Presented paper "Reliability analysis of computer center at Yobe state university, Nigeria under different repair policies pp 257. 2015" ISSN 978-1-60595-257-4.

[65]    V. V. Singh, Yusuf Umar Madaki, V. N. Maurya and Babagana Modu, "Application of discriminate analysis on bronchopulmonary dysplasia among Infants: A case study of UMTH and UDUS hospitals in Maiduguri, Nigeria, *American Journal of Theoretical and Applied Statistics* (USA), Vol. 4, No.2, pp. 44-51, 2015. ISSN: 2326-9006.

[66]    V. V. Singh, V. N. Maurya, B. Singh, S. Vashist, and G. Ogubazghi, "Effectiveness performance analysis of soil minerals (Fe/Zn) on soil fertility and cropping patterns using X- Ray Fluorescence Spectrometer (XRF) and ANOVA method," *American Journal of Biological and Environmental Statistics, Science Publishing Group, USA*, Vol. 1(1), pp.9-18, 2015. ISSN Online: 2471-979X.

**Publications Year 2014.**

[67]    V. V. Singh and Mangey Ram, "Multi-state k-out-of-n type system analysis," *Mathematics in Engineering, Science and Aerospace,* vol. 5, No. 3, pp. 281-292, 2014. **Scopus Indexed Journal.** ISSN: 2041-3165. Impact score: 0.78

[68]    V. V. Singh and D. K. Rawal, "Availability and Cost analysis of complex system under Pre-emptive resume repair policy using copula distribution," *Pakistan J. of Statistics and Operation Research, Vol. 10(3), pp. 299-312, 2014*. ISSN: 2220-5810. Scopus Index Journal. Impact score: 1.60

[69]    V. V. Singh and Chiwa Musa Dalah, "Study of reliability measures of a two-unit standby system under the concept of switch failure using copula distribution," *American Journal of Computational and Applied Mathematics,* vol. 4(4), pp. 118-129, 2014. ISSN: 2165-8943

[70]    Dilip Kumar Rawal, M. Ram, V. V. Singh "Modelling and availability analysis of internet data center with various maintenance policies," *International Journal of Engineering, Transactions A: Basics,* vol. 27, No. 4, pp. 599-608, 2014. [Materials and Energy Research Centre, IRAN, Indexing: SCOPUS]. ISSN: 1025-2495. Impact factor: 1.16

[71]    V.V. Singh and Jyoti Gulati, "Availability and cost analysis of a standby complex system with different type of failure, under waiting repair discipline using Gumbel- Hougaard copula." *ICICT, 2014, IEEE Proceedings*, pp. 180-186. DOI: 10.1109/6781275.

[72]    Jyoti Gulati, V. V. Singh, D. K. Rawal, and Babagana Modu, "Availability analysis system with involvement of two subsystems using Copula distribution," I*CRITO Proceeding, 2014, Amity University Noida, India*. pp. 72-78, 2014.

[73]    V. V. Singh, V. N. Morya and D. K. Arora, "Cost-effective perspective and scenario development on economic optimization for multiple- use dry- season water resource management," American *Open Journal of Agricultural Research,* vol. 2, No. 1, pp. 1- 21, July 2014. ISSN: 2333 - 2131 (online).

[74]     V. V. Singh, V. N. Maurya and Yusuf Umar Madaki, "Statistical analysis of the rate of kidney (renal) failure, Application and Future Scope of Fundamental Mathematical and Computational Sciences in Engineering & Technology," *American Journal of Applied Mathematics and Statistics,* vol. 2, No. 6A, pp. 6-12, 2014. The USA. ISSN 2328-7292.

**Publications Year 2013.**

[75]     V. V. Singh, S. B. Singh, Mangey Ram & C. K. Goel, "Availability, MTTF and cost analysis of a system having two units in a series configuration with the controller," *International Journal of System Assurance and Management,* vol. 4, issue 4, pp 341-352, 2013. [Springer Publishers, Netherland, and India, Indexing: SCOPUS]. ISSN 0976-4348.Impact factor 1.72

[76]     V. V. Singh, Mangey Ram & S. B. Singh, "Stochastic analysis of a standby complex system with waiting repair strategy," *IEEE Transactions on System, Man, and Cybernetics System,* vol. 43, No.3, pp. 698-707, 2013. IEEE Publishers, United States of America, Indexing: SCOPUS, Impact Factor 10.65. ISSN:21682216.

[77]     V. V. Singh, Dilip Kumar Rawal & Mangey Ram, "Cost analysis of an engineering system involving subsystems in a series configuration," *"IEEE Transactions on Automation Science and Engineering,"* vol. 10, issue, 4, 2013. P.P, 1124-1130. *IEEE Publishers*, United States of America, Indexing: SCOPUS, Impact Factor 10.6533. ISSN: 1545-5955.

**Publications year (2011, 2010,2009)**

[78]     V. V. Singh and Dilip Kumar Rawal, "Availability analysis of a system having two units in a series configuration with the controller and human failure under different repair policies," *International J. of Scientific and Engineering Research,* vol. 2 (10), pp. 1- 9, 2011.ISSN:2229-5518.

[79]     V. V. Singh, S. B. Singh, C. K. Goel, and Dilip Kumar, "Availability analysis of a system having two units in a series configuration with the controller and human failure," Proceedings Recent Trends in Materials and Devices, pp. 92-98, 2011, ISBN 978-81-920913- 4-1.

[80]     V.V. Singh, S.B. Singh, Mangey Ram & C. K. Goel, "Availability analysis of system having three unit's super priority, priority and ordinary under primitive resume repair policy," *International Journal of Reliability and Applications*, vol.11 No.1, pp. 41-53. 2010, Index- Journal.  Korean Reliability Society, Korea. ISSN: 1598-0073.

[81]     V. V. Singh, Pratap Kumar, & A. K. Agrawal, "Reliability analysis of a standby complex system with activation mode," *International J. of Math. Sci. & Engg. Appls.* Vol.5, No. (V), pp. 345-357, 2011. ISSN 0973-9424. Global impact factor.0.455.

[82]     V. V. Singh, S. B. Singh & C. K. Goel, "Reliability analysis of LINUX operating system connected in a LAN, *International J. of Math. Sci. & Engg. Appls. vol. 3, No III, pp. 211-222, 2009.* ISSN 0973-9424.

[83]     V. V. Singh, S. B. Singh & C. K. Goel, "Reliability modeling of internet data center," *International J. of Math. Sci. & Engg. Appls*. Vol.3, No. IV, pp. 231-244, 2009. ISSN 0973- 9424. Global impact factor.0.455.

[84]     V. V. Singh, S. B. Singh & C. K. Goel, "Reliability analysis of computer lab connected to the server," *International J. of Math. Sci. & Engg. Appls.* vol.3, No. IV, pp. 17-33, 2009. ISSN 0973-9424. Global impact factor.0.455.

**Conferences (Participated):**

[1]  Symposium held at C.C.S University Meerut with All India Symposium on Mathematics into the 21 Century under Allahabad Mathematical Society during March 26- 27, 2000.

[2]  International Conference held at C.C.S University during Dec 29-31 -2005. (Presented paper on Reliability Modeling) title 'Reliability analysis of a Linux Operation system connected in a LAN'

[3]  National Seminar on Engg. & Mathematical Modeling held at Dronacharya College of Engineering & Technology, Greater Noida, June 2009.

[4]  National Conference on Recent Drifts Breaks in applied science & its Technology for innovations Management held from 7th to 9th August 2009 at Krishna Institute of Engineering and Technology (Uttar Pradesh Technical University), Ghaziabad. Presented a paper title "Availability of a system consisting two subsystems…..repair policy"

[5]  National Conference on Recent Trends in Materials and Devices, held at Amity University, Noida during 20-22 May 2010. (Presented paper on Reliability Modeling).

[6]  National Conference on "Recent Trends in Materials and Devices" held at Amity University Noida during 19-21 May 2011. (Presented paper on Reliability Modeling).

[7]  International Satellite Seminar on *"Role of Mathematics in Science and Engineering,"* organized by Department of Mathematics, Graphic Era University, Dehradun, Uttarakhand, India on May 13-14, 2011. A paper entitled "Reliability Analysis of a Linux Operating System Connected in a LAN to Two Different Topologies Employing Copula in Repair" was presented by Dr. V. V. Singh in co-authorship with Mangey Ram, S. B. Singh, and Dilip Kumar.

[8]  International Conference on the topic entitled *"Issues and Challenges in Intelligent Computing Techniques"* organized jointly by the Uttrakhand State Council for Science & Technology (UCOST), Dehradun and Vijnana Bharati, Doon University, Dehradun, Uttarakhand, India on February 06-07, 2010, during *2nd Rashtriya Yuva Vaigyanik Sammelan.* A research paper entitled *"Availability analysis of a standby complex system with human failure and waiting repair"* by Mangey Ram, V. V. Singh and S. B. Singh was presented.

[9] ICICT- 2014 held at Krishna Institute of Engineering and Technology (Uttar Pradesh Technical University), Ghaziabad, India during 6-8 February 2014. Paper presented entitled *"Availability and cost analysis of a standby complex system with different type of failure, under waiting repair discipline using Gumbel-Hougaard copula"* by V. V. Singh and Jyoti Gulati.

[10] ICEECE- 2015. International Conference on *Energy Environmental and Chemical Engineering* held in Bangkok during 28-29 June 2015. Funded by TET fund, Nigeria. Presented paper "Reliability analysis of computer center at Yobe state university, Nigeria under different repair policies pp 257. 2015" ISSN 978-1-60595-257-4.

[11] Kalka Institute for Research & and Advance Studies, Annual Conference attended as Guest of Honor. 14 March 2014 India.

[12] ICFST- 2017. International Conference on "Frontier of Science & Technology-2017" held at Department of Applied science KIET Group of institutions, Ghaziabad, UP., and India during 6-7, Jan 2017. Session Chaired.

[13] 2ND Annual International conference Northwest University Kano organized by faculty of science Northwest University, Kano, and Held on Sunday 6th to Wednesday 9th Nov 2016. Presented a research paper titled "Availability and cost analysis of the two unit's

redundant system under different failure and repair policy using copula."

[14] 3$^{rd}$ Annual International conference Northwest University Kano organized by faculty of science Yusuf Maitama Sule University, Kano, and Held on Monday 13$^{th}$ to Wednesday 15$^{th}$ Nov 2017. **Chaired Session** for a technical presentation.

[15] 9$^{th}$ International conference on Quality Infocom, Technology & Business Operations (ICQRITO 2018) held on 27-29 Dec 2018 at conference center University of Delhi. **Presented paper title "**Probabilistic Assessment of a complex system in series configuration with different types of failure and two types of repairs using Copula distribution"**.**

[16] 9$^{th}$ International conference on Quality Infocom, Technology & Business Operations (ICQRITO 2018) held on 27-29 Dec 2018 at conference center University of Delhi. **Chaired a Session** for a technical presentation.

[17] 4$^{th}$ Annual International conference 2019 (YUMSCIC 2019) at YUMSCIC 2019, held from, Monday 8$^{th}$ to Thursday 11$^{th}$ July, 2019 at Yusuf Maitama Sule University, Kano, Nigeria. **Presented paper title "**Probabilistic assessment of a two units' complex repairable system with switch and human failure using Copula Approach".

[18] Online two days international conference on "Mathematical Science and Computational Intelligence" Dec 21-22, 2020 Sri Mata Vaishno Devi University, Katra (J& K) in association with Advance Research Educational Society. **Keynote Speaker on topic**: An exact Method for performance Evaluation of Complex Systems under k-out-of-n: G/F Operational Scheme through Copula Approach.

2nd International Conference on Advancements in Interdisciplinary Research (ICAIR- 2021) October 29 - 31, 2021, Organized by Department of Mathematics, Dr. Bhimrao Ambedkar University, Khandari Campus, Agra, India. In association with FIRMS India.

**Keynote Speaker on topic** "An exact method for performance evaluation of complex systems under k- out-of-n: G/F operational scheme".

[20] International Conference on Innovations and Application in Science and Technology (ICIAST 21- 23 Dec 2021), Department of Applied Science at Galgotia College of Engineering & Technology, Greater Noida, Uttar Pradesh, India. 201306, as a Keynote **Speaker on topic** "Some new developments in the study of complex repairable systems with n- active redundant units."

[21] **Keynote Speaker on topic** "The demands of contemporary society and the advancement of science and technology" 8 $^{th}$ international conference at Invertis University Bareilly 15$^{th}$ March 2024.

MEMBER OF EDITORIAL BOARD:

1. Member of Editorial Board of Journal of Reliability and Statistical Studies, JRSS, River publisher Russia.
2. Member of Editorial Board of SOP Transactions on Applied Mathematics Journal.
3. Member of Editorial Board of **IOSRD**-International Organization of Scientific Research and Development.
4. Member of Editorial Board of Baobab Journal Science and Technology.

(Yobe State University, Nigeria)
5. Member of Editorial Board of Operation Research and Decisions. Published from Spain.

## MEMBER OF ACADEMIC BODIES:

[1]  Member of Academic Council, Yobe State University, the Federal Republic of Nigeria from Sep 2013 to date.
[2]  Senior Member of IEEE Society.
[3]  Reviewer of International Journals of IEEE.
[4]  Reviewer of Springer Journals.
[5]  Reviewer of National Journals.
[6]  Reviewer of JRSS.
[7]  serve Open Journal of Engineering Science (OJES)
[8]  Reviewer of Elsevier Journals.
[9]  Member of Editorial Board of IJWRE.
[10] Approved Supervisor of Mewar University, Chittorgarh, for guiding Ph. D. students.
[11] Approved Supervisor of Graphic Era University Dehradun, India for guiding Ph.D. students.
[12] Co-author of Engineering Mathematics, Vol. I, Himani Publisher.

## Experience (Total About 29 Year)

[1] D. N. (P. G.) College, Meerut, U. P. from Jan. 1992 to April 1993 as a part-time Lecturer on a temporary basis in Department of Mathematics.

[2] V. M. K. (P. G.) College, Khetri, Rajasthan, India from July 1993 to August 2012 as Lecturer/Assistant Professor& Professor of Mathematics in the scale of (Rs. 49240-600-89617).

[3] Worked as Professor, Department of Mathematics, Yusuf Maitama Sule University Kano, and Federal Republic of Nigeria in scale Counuss 7/10 Nigerian University scale since Jan 2016 to Jan 2023.

[4] Currently working as Professor Mathematics in Lingayas Vidyapeeth Deemed University Faridabad, Haryana, India from August 2023 to date.

## Ph.D. Students:

**[1]** Dilip Kumar Rawal (MRU1002944): Mewar University, Chittorgarh, Raj.    India. Complete 2016.
  *Reliability Modeling for Complex System Using Copula.*

**[2]** Amit Kumar Singh (PHD11MA011): Graphic Era University, Dehradun, India. Complete 2016 Joint supervision as External Supervisor.
  *Reliability measures analysis for industrial based complex systems.*
**[3]** Monika (MUR1409097) Mewar University, Chittorgarh, Raj.  India. 2022.
  *Reliability Modeling and Maintenance for Complex Systems Using Copula.*
**[4]** Jyoti Gulati (MUR1203579) Mewar University, Chittorgarh, Raj.  India. Ongoing.
  *Reliability and Cost Accessibility for Complex Systems Using Copula.*
 [5] Priyavada (19PHMT03): Lingayas Vidyapeeth Faridabad, Haryana, Thesis submitted on Feb 2024.
  *A study of Optimization Problems by Using Evolutionary computational approach*

## M.Sc., Thesis (Supervised)

[1] Abdul Kareem Lado: Completed 2017.MSC/MATH/14/0009
Title: Analysis of complex repairable system having two subsystems in series configuration.

[2] Kabiru Hamisu: Completed 2017. MSC/MATH/14/0011
Title: Reliability assessment of complex system consisting two subsystems in series configuration using Gumbel- Hougaard family copula distribution.

[3] Abubakar Idris Muhammad: Completed 2020. MSC/MATH/15/0008
Title: Performance Evaluations of African Textile Industrial system using copula Linguistics Approach.

[4] Musaddad Sidi Bala 2020, MSC/MATH/14/005
Title: Performance evaluation of complex system in combination of subsystems under different failure and copula repair approach, (Final thesis submitted in May 2021)

[5] Abbas Jibrin Bin. 2020, MSC/MATH/14/0008
Title: Performance analysis of the complex system with three subsystems in series configuration under failure and repair discipline using Gumbel Hougaard family copula approach. (Final thesis in May 2021)

**B.Sc. Project:**  More than 30 Students Supervised for B. Sc., Mathematics Research Project at Yobe State University, Damaturu, Nigeria, Northwest University Nigeria & Kano University of Science and Technology Wudil, Nigeria.
**Hobbies**: Reading magazine and journals & Research Activities.

**Subjects/ Courses Taught:**

1.  Abstract Algebra for M.Sc. students
2. Differential Equations M.Sc. students
3. Discrete Mathematics B.Sc. students
4. Operation Research M.Sc. students.
5. All courses BSC Mathematics Syllabus Rajasthan University.
6. Engineering Mathematics I for B. Tech.
7. Engineering Mathematics II for B. Tech.
8. Engineering Mathematics III for B. Tech.
9. Discrete Mathematics for M. C. A.
10. Numerical analysis
11. Operation Research
12. Partial differential equation
13. Complex Analysis

**Administrative Responsibilities:**

[1] Chief Warden at Dehradun Institute of Engineering and Technology (Uttar Pradesh Technical University), India (2007 to 2010).
[2] Chief Proctor at Sarvottam Institute of Technology & Management (Uttar Pradesh Technical University), Greater Noida (2011 to 2012).
[3] Examination Superintendent at Noida Institute of Engineering and Technology (Uttar Pradesh Technical University), Greater Noida for UPTU Examination.
[4] Assistant Superintendent of UPSEAT Entrance Examination, Controller of Examination, Examiner of Theory Examination of UPTU Evaluation.
[5] Head of Department of Mathematics& Statistics Yobe State University, Damaturu, Yobe State, Nigeria from Sep 2013 till Dec 2015.
[6] Member of Senate Yobe State University, Damaturu, Nigeria.
[7] Examination theory question paper setter of several universities in India.

**REFERENCES:**

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