

Publication of Faculty in Journal

Mathematics Department

Name	Title	Status	Date	Journal	Volume
Mr. Naveed Jaffar	Application of Soft-Set Relations and Soft Matrices in Medical Diagnosis using Sanchez's Approach ,	Published	January,20 20	<i>International Journal of Computer Applications,</i>	177 (32): 7- 11.
	Intuitionistic Fuzzy Soft Matrices, Compliments and Their Relations with Comprehensive Study of Medical Diagnosis,	Published	January,20 20	<i>International Journal of Latest Engineering Research and Applications,</i>	5 (1): 23-30.
	A Comprehensive Study of Intuitionistic Fuzzy Soft Matrices and its Applications in Selection of Laptop by Using Score Function,	published	February,2 020	<i>International Journal of Computer Applications,</i>	177 (38): 8- 17.

	Interval Valued Fuzzy Soft Sets and Algorithm of IVFSS Applied to the Risk Analysis of Prostate Cancer,	published	February,2020	<i>International Journal of Computer Applications,</i>	177(38): 18-26.
	Medical Diagnosis Using Neutrosophic Soft Matrices and Their Compliments,	published	February,2020	<i>International Journal of Advance Research in Computer Science,</i>	11(1): 1-3
	Aggregate Operators of Neutrosophic Hypersoft Set,	published	February,2020	<i>Neutrosophic Sets and Systems</i>	32 :294-307
	A New Approach of				

	Neutrosophic Soft Set with Generalized Fuzzy TOPSIS in Application of Smart Phone Selection,	published	March,2020	<i>Neutrosophic Sets and Systems</i>	
	Single and Multi-valued Neutrosophic Hypersoft set and Tangent Similarity Measure of Single valued Neutrosophic Hypersoft Sets,	published	March,2020	<i>Neutrosophic Sets and Systems</i>	32 : 317-329
	Similarity Measures of Tangent, Cotangent and Cosines in Neutrosophic Environment and their Application in Selection of Academic Programs,	published	March,2020	<i>International Journal of Computer Applications,</i>	177(46): 17-24.

	New Technology in Agriculture Using Neutrosophic Soft Matrices with the Help of Score Function,	published	March,2020	<i>International Journal of Neutrosophic Sciences,</i>	3(2): 78-88
	Aggregation Operators Of Bipolar Neutrosophic Soft Sets And It's Applications In Auto Car Selection	published	March,2020	<i>International Journal of Neutrosophic sciences</i>	Vol 8 : 17-26
	A Best Technique of Weight Lose using Fuzzy Soft Systems,	published	April,2020.	<i>International Journal of Computer Applications</i>	176(16):
	A Best Way to Access Gas Station using Fuzzy Logic Controller in a Neutrosophic Environment, Scientific.	published	April,2020.	<i>Inquiry and Review SIR,</i>	Vol 4: 36-49 (HEC Approved)
	Trigonometric	Published	Sep 2021	IEEE Access	Vol 9:

	Similarity Measures for Neutrosophic Hypersoft Sets With Application to Renewable Energy Source Selection				129178-129187 (W-Category HEC Approved)
	Aggregation Operators of Fuzzy Hypersoft Sets	Published	Sep 2021	Turkish Journal of Fuzzy Systems	Vol 11: 1-17
Ms. Nousheen Ilyas	Multi-Dimensional decision- Making for Airport Operation Performance Using Triangular Fuzzy Numbers	Published	2019	<i>Scientific Inquiry and Review.</i>	Vol.3, Issue 3
	Dualities between Fourier cosine and Integral transformations	Published	2021	<i>Journal of Multidimensional Research and Review</i>	Vol.2, Issue 1, 39-54
Ms. Maryam Fatima	Intuitionistic fuzzy soft matrices, complement and their relations with comprehensive study of medical diagnosis	Published	January, 2020	<i>International Journal of Latest Engineering Research and Applications,</i>	

Dr. Zahida Perveen	On Double Weibull Distributions: properties and estimations	Published	March, 2017	Pakistan journal of Sciences	
	Some properties of Volume Biased Weighted Weibull Distribution	Published	June 2017	International Journal of Advanced and Applied Sciences	

	On Size Biased Weighted Weibull Distribution	Published	Dec 2017		
Dr. Sarmad Arshad	2-Stage Fractional Runge Kutta Method for Time-Fractional Logistic Growth Model	Published	2020	Discrete Dynamics in Nature and Society	
	Analysis of Time-Fractional Semi-Analytical Solutions of Strong Interacting Internal Waves in Rotating Ocean.	Published	2020	Punjab University Journal of Mathematics,	52(3), 99-111.
	Semi-Analytical Solutions of Time-Fractional KdV and Modified KdV Equations.	Published	2019	Scientific Inquiry and Review	3(4), 47-59.
	Laplace Variational Method for System of Partial Differential Equations.	Published	2018	Journal of Physics: Conference Series	Vol. 1039, No. 1, p. 012005). IOP Publishing.
	Comparison of optimal homotopy analysis method and fractional homotopy analysis transform method for	Published	2017	Advances in Mechanical Engineering,	9(3), 1-12.

	the dynamical analysis of fractional order optical solitons.				
	Numerical analysis of plasma KdV equation: time-fractional approach.	Published	2017	International Journal of Applied and Computational Mathematics,	3(1), 1325-1336.
	A review on hyperthermia via nanoparticle-mediated therapy.	Published	2017	Bulletin du cancer,	104(5), 452-461
	Nonlinear shallow water waves: A fractional order approach.	Published	2016	Alexandria Engineering Journal,	55(1), 525-532.
	Modified finite difference schemes on uniform grids for simulations of the Helmholtz equation at any wave number	Published	2014	Journal of Applied Mathematics,	
	Dispersion Free Finite Difference Schemes for Wave Propagation	Published	2012	2nd International Symposium of Frontiers of Computational Sciences	(ISFCS-2012), ISBN: 978-969-8453-02-2

				Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, Pakistan	
Ms. Rubina Shoaib	The calculation of pasture coefficient at any point of the flow past a wedge of viscous incompressible micro polar fluid using a numerical method	published	Oct 2017	Pakistan journal of engineering and applied sciences	
Lt. Col (R) Riaz Khan	Mathematical modeling to simulate biological fluid flow in collapsible tube.	Published	2017	International journal of scientific and engineering research	
Ms. Sana Akram	Integrated approach of set theory and pattern search methods for solving aircraft attacking problem	Published	2017	Pakistan journal of sciences	Vol 69(1), 136-143
	Multi-Criteria Decision Making for Airport Operation Performance by using triangular Fuzzy Numbers	Published	2019	Scientific inquiry and Review	
	Least eigenvalue of the	Published	2019	Open Mathematics	17(1):1319-

	connected graphs whose complements are cacti				1331
	Solution of Maintenance Strategy Selection Problem by using modified Fuzzy TOPSIS for of Material Handling Equipment	Published	2020	Sukkur IBA University	Vol (3). No 2
	Evolutionary simplex adaptive Hooke-Jeeves algorithm for economic load dispatch problem considering valve point loading effects	Published	2020	Ain Shams Engineering Journal	Vol (10), 1016-1026
	A control of glucose level in insulin therapies for the development of artificial pancreas by Atangana Baleanu derivative	Published	2020	Alexandria Engineering Journal	Vol(54), 2639-2648
	Bounds on F-index of tricyclic graphs with fixed pendant vertices	Published	2020	Open Mathematics	Vol(18), 151-161
Dr Noreen Akram	“Analysis of General rate model of linear chromatography considering finite rates	Published	2016	International journal of Chemical Engineering	13–23

	of the adsorption and desorption steps”			Research and Design	
	Analysis of two-component non-equilibrium model of linear reactive chromatography	Published		international journal Chromatographia	
	Nonlinear model of liquid chromatography considering finite rates of adsorption-desorption kinetics and core-shell adsorbents	Published	2018,	Journal of Liquid Chromatography & Related Technologie	VOL. 41, NOS. 17-18, 964–972
Dr. M. Nadeem	Role of Graph Theory to Facilitate Landscape Connectivity: Subdivision of Harary Graph.	Published	(2018).	<i>Polish Journal of Environmental Studies,</i>	27, 993-999.
	Statistical Modeling for the Extraction of Dye from Natural Source and Industrial Applications.	Published	(2019).	<i>Polish Journal of Environmental Studies,</i>	28, 2145-2150
	Topological Descriptor of 2-Dimensional Silicon Carbons and their Applications.	Publishe d	(2019).	<i>Open Chem.,</i>	17, 1473-1482

	On Some Applications of Bipartite Graphs Associated with Algebraic Structures..	Published	(2020).	<i>Open Mathematics</i>	18, 57-66
	On Some Applications Related with Algebraic Structures Through Different Well Known Graphs.	Published	(2021).	<i>Journal of Discrete Mathematical Sciences and Cryptography,</i>	24, 451-471.
Ms Mahrukh Irfan	Tangent, Cosine, and Ye Similarity Measures of m-Polar Neutrosophic Hypersoft Sets	Publishe d	February 2021	Neutrosophic Sets and Systems	Page no 155-174
Ms. Aimen	“THE ROLE OF NEWS MEDIA IN DEVELOPING POLITICAL AWARENESS”	Published	2019	Published in Gomal University Journal,	V35(2)
Ms. Shumila Nisar	Quality of Life in patients of Melasma	Published	Jan, 2017	LGU Journal of Life Sciences	
	Economic Determinants Affecting Terrorism in case of Pakistan: An ARDL Bounds Testing Approach to Co–	(Publishe d	2019	European online journal of natural and Social sciences.	1805-3602 Vol 8(4)

	integration.				
	The Nexus between Inflation and Inflation Uncertainty of four South Asian Economies	Published	May 2020	European Online Journal of Natural and Social Sciences	1805-3602 Vol 9(2)
Arshad Hameed	The Nexus between Inflation and Inflation Uncertainty of four South Asian Economies	Published	May 2020	European Online Journal of Natural and Social Sciences	1805-3602 Vol 9(2)
	Economic Determinants Affecting Terrorism in case of Pakistan: An ARDL Bounds Testing Approach to Co-integration.	Published	2019	European online journal of natural and Social sciences.	1805-3602 Vol 8(4)
Dr. Naureen Riaz	Impact of Employee Relation on Employee Performance in Hospitality Industry of	Published	2013	Entrepreneurship and Innovation Management Journal	ISSN: 2310-0079, Vol. 1, No. 1

	Pakistan”				
	Regression-Cum-Exponential Ratio Type Estimators for the Population	Published	2014	Middle-East Journal of Scientific Research	ISSN: 1990-9233.
	Solution of war planning problem using derivative free methods	Published	2015	Scientific International	27(1),395-398,2015
	Generalized Exponential Regression Type Estimator By using two auxiliary information	Published	2015	Scientific International	1013-5316, Vol 1, No 1
	Exponentiated Moment Exponential Distribution and Power Series Distribution with Applications: A New Compound Family.	Published	2017	International Journal of Advanced Research (IJAR)	5(07), 1335-1355
	Generalized inverted Kumaraswamy distribution: properties and application.	Published	2017	Open Journal of Statistics	7(4), 645.
	Marshall-Olkin Moment Exponential Distribution.	Published	2018	Journal of ISOSS	Vol. 4 (1), 13-31
	Generalized Estimator for Population	Published	2018	<i>Advances and Application in</i>	53(6), 771-

	Variance in Systematic Random Sampling			<i>Statistics,</i>	788.
	Generalized estimator for the estimation of rare and clustered population variance in adaptive cluster sampling.	Published	2019	<i>Journal of Statistical Computation and Simulation</i>	89(11), 2084-2101.
	THE ROLE OF NEWS MEDIA IN DEVELOPING POLITICAL AWARENESS.	Published	2019	<i>Gomal University Journal of Research,</i>	35(2).
	Generalized Regression-Cum-Exponential Estimators Using Two Auxiliary Variables for population variance in Simple Random Sampling	Published	2019	<i>Gazi University Journal of Science,</i>	32(3), 1045-1058.
	The Role of News Media in Developing Political Awareness	Published	2020	Gomal University journal of Research	35(2), 79-86
	Joint Influence of Exponential Ratio and Exponential Product Estimators for the Estimation of Clustered population variance in Adaptive Cluster Sampling	Published	2020	Journal of Thailand Statistician	18(1), 65-76.
	Analysis of Advantages and Problems in teaching and Assessment with Online System during Covid -19	Published	2021	LGU Journal of Computer Science and IT	1905(1), 15-24.
Mr. Muhammad	Impact of Water Hardness in	Published	2018	<i>Punjab University</i>	51(4): 73-84.

Saqlain	Instinctive Laundry System based on Fuzzy Logic Controller			<i>Journal of Mathematics</i>	
	Change in The Layers of Earth in Term of Fractional Derivative: A Study	Published	2018	<i>Gomal University Journal of Research</i>	34(2): 27-31
	Impact of pH of water on washing time in automatic washing machine	Published	2018	<i>Scientific Inquiry and Review</i>	2(1): 23-32.
	Numerical solutions for third order ordinary differential equation by differential transform method & Elzaki transform method.	Published	2018	<i>Scientific Inquiry and Review</i>	2(4): 01–11.
	Effect of pH on Detergent in Automatic Washing Machine on	Published	2018	<i>Scientific Inquiry and</i>	2(3): 31–40

	consumer's perception			<i>Review</i>	
	Generalization of TOPSIS for Neutrosophic Hypersoft set using Accuracy Function and its Application	Published	2019	<i>Neutrosophic Sets and Systems (NSS)</i>	27: 131-137.
	Application of Generalized Fuzzy TOPSIS in Decision Making for Neutrosophic Soft set to Predict the Champion of FIFA 2018: A Mathematical Analysis	Published	2019	<i>Punjab University Journal of Mathematics</i>	51(8): 111-126.
	Smart phone selection by consumers' in Pakistan: FMCGDM fuzzy multiple criteria group decision making approach	Published	2019	<i>Gomal University Journal of Research</i>	34(1): 27-31.
	Prediction of Cricket World Cup 2019 by	Published	2019	<i>International Journal of</i>	Volume 10, Issue 2, Pp

	TOPSIS Technique of MCDM-A Mathematical Analysis			<i>Scientific & Engineering Research</i>	789-792.
	Comparison of Computation Period for Some Newtonian Fluid Flow Problems by Elzaki, Sumudu and Laplace Transform	Published	2019	<i>Science Inquiry Rev.</i>	3(1): 45–51.
	Single and Multi-valued Neutrosophic Hypersoft set and Tangent Similarity Measure of Single valued Neutrosophic Hypersoft Sets	Published	2020	<i>Neutrosopic Sets and Systems (NSS)</i>	32: 317-329.
	A New Approach of Neutrosophic Soft Set with Generalized Fuzzy TOPSIS in Application of Smart Phone Selection	Published	2020	<i>Neutrosopic Sets and Systems (NSS)</i>	vol. 32 , pp. 307-316,

	Aggregate Operators of Neutrosophic Hypersoft Set Aggregate Operators of Neutrosophic Hypersoft Set	Published	2020	<i>Neutrosopic Sets and Systems (NSS)</i>	vol. 32 , pp. 294–306
	Multi-Valued Interval Neutrosophic Linguistic Soft Set Theory and Its Application in Knowledge Management	Published	2020	<i>IET CAAI Transactions on Intelligence Technology</i>	1-13
	TOPSIS for Multi Criteria Decision Making in Octagonal Intuitionistic Fuzzy Environment by Using Accuracy Function	Published	2020	<i>Journal of New Theory</i>	31 , 32-40.

	Rudiments of N-framed soft sets	Published	2020	<i>Punjab University Journal of Mathematics</i>	52(5): 15-30.
	Multi-Polar Neutrosophic Soft Sets with Application in Medical Diagnosis and Decision-Making	Published	2020	<i>Neutrosophic Sets and Systems</i>	Vol,33, pp. 183-207
	Application of Soft-Set Relations and Soft Matrices in Medical Diagnosis using Sanchez's Approach,	Published	2020	<i>International Journal of Computer Applications</i>	Volume 177 – No. 32, (0975 – 8887)

	Octagonal Neutrosophic Number: Its Different Representations, Properties, Graphs and De-Neutrosophication	Published	2020	<i>International Journal of Neutrosophic Science</i>	vol. 8, no. 1, pp. 19–33.
	Linear and Non-Linear Octagonal Neutrosophic Numbers: Its Representation, α -Cut and Applications.	Published	2020	<i>International Journal of Neutrosophic Science</i>	vol. 3, no. 1, pp. 29–43
	New Technology in Agriculture Using Neutrosophic Soft Matrices with the Help of Score Function	Published	2020	<i>International Journal of Neutrosophic Science</i>	vol. 3, no. 2, pp. 78–88
	Distance and Similarity Measures for Neutrosophic HyperSoft Set (NHSS) With Construction of	Published	2021	<i>IEEE Access</i>	2169-3536

	NHSS-TOPSIS and Applications				
	TOPSIS Method Based on the Correlation Coefficient of Interval-Valued Intuitionistic Fuzzy Soft Sets and Aggregation Operators with Their Application in Decision-Making	Published	2021	<i>Journal of Mathematics</i>	2314-4785
	The Application of the Score Function of Neutrosophic Hypersoft Set in the Selection of SiC as Gate Dielectric For MOSFET	Published	2021	<i>Neutrosophic Sets and Systems</i>	2331-608X
	Tangent, Cosine, and Ye Similarity Measures of m-Polar Neutrosophic Hypersoft Sets	Published	2021	<i>Neutrosophic Sets and Systems</i>	2331-608X
	An integrated model of Neutrosophic TOPSIS with application in Multi-Criteria	Published	2021	<i>Neutrosophic Sets and Systems</i>	2331-608X

	Decision-Making Problem				
	Some Fundamental Operations on Interval Valued Neutrosophic Hypersoft Set with Their Properties	Published	2021	<i>Neutrosophic Sets and Systems</i>	2331-608X
	The Selection of LASER as Surgical Instrument in Medical using Neutrosophic Soft Set with Generalized Fuzzy TOPSIS, WSM and WPM along with MATLAB Coding	Published	2021	<i>Neutrosophic Sets and Systems</i>	2331-608X
	Trigonometric Similarity Measures for Neutrosophic Hypersoft Sets With Application to Renewable Energy Source Selection	Published	Sep 2021	IEEE Access	Vol 9: 129178-129187 (W-Category HEC Approved)
	Neutrosophic Hypersoft Matrix Theory: Its Definition, Operators, and Application in	Published	Sep 2021	<i>Springer</i>	Vol 2: HEC Approved)

	Decision-Making of Personnel Selection Problem				
	Aggregate, Arithmetic, and Geometric Operators of Octagonal Neutrosophic Numbers and Its Application in Multi-Criteria Decision-Making Problems	Published	Sep 2021	<i>Springer</i>	Vol 2: HEC Approved)
	Application of Generalized Aggregate Operators on Neutrosophic Hypersoft Set in Decision-Making	Published	Sep 2021	<i>Springer</i>	Vol 2: HEC Approved)
	The Application of Neutrosophic Hypersoft Set TOPSIS (NHSS-TOPSIS) in the Selection of Carbon Nano Tube-based Field Effective Transistors CNTFETs	Published	June 2021	<i>Neutrosophic sets and System</i>	Vol 43: 212- 224 HEC Approved)
	On Some Properties of Plithogenic Neutrosophic Hypersoft Almost	Published	June 2021	<i>Neutrosophic sets and System</i>	Vol 43: HEC Approved)

	Topological Group				
	n-ary Fuzzy Hypersoft Expert Sets	Published	June 2021	<i>Neutrosophic sets and System</i>	Vol 43: HEC Appro ved)