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S. No.	CONTENTS	Page No.
001	Paediatric Drug Development: Regulatory Framework as per USFDA Santhosh Kumar S, Madhavi Lakshmi Ratna Bhavaraju and Shivanad K Mutta	82851-82856
002	Indexed Results and Tables Relating to the Quick Switching System (QSS-1) with a Single Sampling Plan as the Reference Plan Esha Raffie B	82857-82865
003	Heavy Metal Contamination of Soil: A Tractable Study in Gold Tailings Area of Kolar Gold Fields, India- using ICP-OES and AES Ashok Dhayalan, Vinoth Kumar C, Saraswathi, Jagadisha TV and Naveen Kumar S	82866-82875
004	Analysis of Virtually Shopping Customer Employing RFM Technique and Clustered using Machine Learning Technique Nilam N. Parmar and Sweta S. Panchal	82876-82890
005	Navigating Fragmentation Maze: Unraveling the Impact of Content Fragmentation on OTT Consumption Habit Jasmine V.M and Keerthana Murali	82891-82898
006	Holistic Therapy – An Integrative Approach to Physical and Mental Wellbeing Ujjwala Kakarla	82899-82904
007	Comprehensive Analysis of Microstrip Patch Antenna for Wireless Application Bharat D Prajapati and Bhavesh Jaiswal	82905-82916
008	Effective Completion of TNPSC Examination using Fuzzy Matrix V.Jayapriya and S. Akila Devi	82917-82922
009	Standardization of Swarnavanga with Application of Namboori Phased Spot Test Madhav Maheshwari, Anitha Hosur and Anjali Gambhava	82923-82927
010	A Probabilistic Machine Learning based Sentiment Analysis Approach for Predicting Customer Reviews Pushpa Bansiwali, Neeraj Shrivastava and Sunil Nimawat	82928-82938
011	Katiparinaah and Body Adiposity Index in Non Alcoholic Fatty Liver Disease : A Cross-Sectional Analytical Study Tanya Gusian, Amrish Chanana and Atal Bihari Trivedi	82939-82943
012	Enhancing Comprehensive Biopsychosocial Assessment in Chronic Musculoskeletal Pain Management: A Multidimensional Approach Thangamani Ramalingam Alagappan and Sudipta Roy	82944-82950

013	Influence of Triple Friction Pendulum Isolator Properties on Torsional Response of Building under Stochastic Ground Motions Dipak Jivani and R.G. Dhamsaniya	82951-82961
014	Prevalence of Post Traumatic Stress Disorder among Road Traffic Accident Victims : A Systematic Review Hetal Jitendrabhai Shah, Sapna Bhavin Patel and Sandip Patel	82962-82972
015	Ethnomedicinal, Nutritional and Bio-Ceutical Benefits of <i>Carica papaya</i> : A Comprehensive Review Debmalya Biswas, Imdadul Mondal, Promit Roy, Ritabrata Das and Saptarshi Samajdar	82973-82984
016	Prevalence and Distribution of Virulence Determinants in Diarrheogenic <i>Escherichia coli</i> associated with Children Under Five Years of Age Sweta Barupal, Sanjay Kochar and Dharmesh Harwani	82985-83001
017	A Study of Proximate, Mineral and Phytochemical Properties of Banana (<i>Musa spp.</i>) Pseudostem Waste Meghna N. Diarsa and Akshaya Gupte	83002-83012
018	Image Normalization with Noise Removal for Early Neurodegenerative Disease Detection Divyasree S and V Kathiresan	83013-83023
019	Seasonal Variations in Soil Properties Across Altitudinal Gradient of Current Jhum Fields in Champhai District, Mizoram L K Thang Ngaihte, Elizabeth Nemhoihkim, O.P. Tripathi and B.P. Mishra	83024-83035
020	Variation in Water Structures from One Organ to Another in a Goat and Their Response to Homeopathic Potencies Derived from Natural Substances : A Spectroscopic Analysis Raj Kumar Singh, Naheed Sultana, Nirmal Chandra Sukul, Nivedita Pande and Anirban Sukul	83036-83043
021	Detailed Pharmacognostic Standardization of <i>Gmelina asiatica</i> Linn. Fruit Radhakrishnan Jaya Prakash and Seventhilingam Kaliamoorthy	83044-83059
022	Microbial Derived Vitamin D2 and Nisin as Dual Function Compounds with Antibiofilm and Anticancerous Activities Namitha and Tessy Anu Thomas	83060-83067
023	Efficacy of Kiastm along with Motor Control Training Exercises in Chronic Non-Specific Neck Pain Patients - A Pilot Study Lopa Das, Shefali Raizada and Prem Kumar B N	83068-83075
024	Beyond the Plate from 3D to 4D: Revolutionizing Food Fabrication with Advanced Printing Technology Soma Basu and A.J. Hemamalini	83076-83085
025	Challenges and Opportunities in Implementing Sustainable WASH Practices in Government Schools: Lessons from Tamil Nadu S.Anushya and J. Subramaniyan	83086-83097
026	A Cross - Sectional Research on Women with Irregular Menstruation and Obesity in Assam, Northeast India Chumi Das, Jumi Das and Tiluttoma Baruah	83098-83106

027	Influence of Poultry Manure Compost and Foliar Application of Seaweed Extract on the Productivity and Profitability of Finger Millet (<i>Eleusine coracana</i> L.) S.Ramesh , G. Rama Prabavathi, P.Sudhakar G. Baradhan and C. Kalaiyarasan	83107-83113
028	Sustainable Agriculture: A Road to Global Food Security Ankita Singh, Ananya Chamola and Chaitali Ghosh	83114-83121
029	A Systematic Review on Efficacy and Safety of N-Acetylcysteine and Carnitine in the Treatment of Hyperinsulinemia for Polycystic Ovary Syndrome Swetha S, Janani S, Sophia S, Santhosh Kumar G, Jain Arvin Robert R, Mohamed Wasim Khan N and Jayasutha Jayram	83122-83134
030	GC - MS Profile of Ethanolic Root Extract of <i>Withania somnifera</i> (Ashwagandha) Neha Singh and Anita R J Singh	83135-83145
031	Performance Enhancement of Grid-Integrated PV System with Fuzzy Plus Fractional Order Notch Filter V.Madhu Sudana Reddy, Dappu Pavan Teja and M. Kondalu	83146-83152
032	AI for Waste Management J.Dhilipan, D.B.Shanmugam and S.H.Karthikeyan	83153-83157
033	Determinants of Shadow Education: Exploring the Impact of Socio-Economic Status, Parental Education Levels, Cultural Expectations, and Policy Environments Sachin Kumar, Poonam Pandita and Kiran	83158-83170
034	Provision of Data Security using Elliptic Curve Cryptography in Cloud Computing Environment N.Krishnamoorthy and S.Umarani	83171-83181
035	Isolation, Purification, and Characterization of Flavonoid from the Aqueous Extract of the Leaves of the <i>Phaseolus vulgaris</i> Linn. Madhavi Badole and Amrin Shaikh	83182-83192
036	A Fractional Order Study of the Type 2 Diabetes Model using the Sumudu Transform Method N. Jeeva, K.M. Dharmalingam, P. Ugasini Preetha and Dumpa Sreepal	83193-83201
037	Tannins Analysis from <i>Rubus fruticosus</i> Root Extract using High Performance Thin Layer Chromatography for Antidiarrheal Activity Mayuri K. Gaikwad, Rahul Chanshetty, Padmaja Kalshetty , Nilesh Kulkarni, Jeevan Dhumal and Mohini Upadhye	83202-83208
038	Exploring Living and Working Conditions of Migrant Workers in Construction Industry in Karnataka - an Empirical Analysis T. Nandhakumar and P. Sakthive	83209-83220
039	Enhanced Skin Cancer Detection through Hyperspectral Imaging and YOLO Shubhendu Banerjee, Pushpita Roy, Divyaansi Singh, Subhankar Sarkar and Soubhagya Das	83221-83228

040	Qualitative Analysis and Antipyretic Validation of Siddha Formulation Pancha Moola Kudineer Chooranam S. Yasiga and S. Visweswaran	83229-83235
041	Allelopathic Proclivities of Tree Leaf Extracts on Seed Germination and Growth of <i>Aracheis hypogea</i> L. and <i>Vigna mungo</i> (L.) Hepper Parveen Kaur and P. Leela	83236-83245
042	Management of Ocular Insect bite through Ayurveda- a Case Study Unnati Desai, Shivkant Sharma, Manjiri Keskar, Anu Vijayan, Manu Prasad	83246-83252
043	Polyherbal Face Pack Development, Formulation Techniques and Evaluation Study Rajesh Kumar Sharma, Disha Singh and Sachin Kumar and A. Elphine Prabahar	83253-83261
044	Comparative Analysis of Classifier Performance: A Study of Weka and Python Implementations across Various Machine Learning Models Mini Agarwal and Bharat Bhushan Agarwal	83262-83274
045	GMOS? - Superficial Sustainers? Or Capital Combating Crusaders? Swapna Anna Jaccob and Premalatha S	83275-83282
046	Role of Schiff base Metal Complexes in Dyes and Paints : A Review Monika Tyagi and Ankit Mahur	83283-83292
047	A Comprehensive Overview of the World Health Organization S.M. Sakthisankaran and K. Kathiresan	83293-83297
048	Wearable Devices and Digital Health Platforms: Forensic Analysis and Data Security Challenges Swagata Shashikant Zarkar, Rahul Kailas Bharati and Shobha Kamalakar Bawiskar	83298-83309
049	An Effect of Virtual Reality in HRD - IT Sector Y T Shahida Banu and R Angamuthu	83310-83313
050	Estimating the Approximate Solution of HIV Infection Model using Homotopy Perturbation Method (HPM) S.Geethamalini and J.Mercy	83314-83320
051	Impact of Silver Nanoparticles against Hepatitis B Virus Sanjana Bhat and Meenal Rehman	83321-83327
052	Screening of Colibactin Producing <i>Escherichia coli</i> from Urinary Isolates S. Kaviya and C. Soundhari	83328-83333
053	Cardioprotective Activity of <i>Hylocereus undantus</i> Fruit Peel Extract against Cyclophosphamide Induced Cardiotoxicity in Rats Mallikarjuna Gandla, Navaneeswar Bathala, Arshiya Pathan, Gunasekhar Reddy Mukkandla, Madhan Mohan Gangarapu, Sameera Bee Kamalapuram and Niranjana Babu Mudduluru	83334-83341
054	Parkinson's Disease Detection using Machine Learning Approach Koushik Karmakar, Nirjhar Mallick , Arpan Maity, Souparna Paul, Rupak Hazra, Souvik Ghosh, Arpan Kumar Das	83342-83349

055	Effect of Inadequate Sleep on Memory and Learning: a study on Adolescents Bhoomika C A, Marjana, Patteshwari Duraiswamy and Sangeetha S R	83350-83357
056	Mathematical Model with an Application of New Topsis Model Approach to Identify the Over Spread of Typhoid T.Kavitha and S. Shunmugapriya	83358-83364
057	Unveiling the Cloud Kitchen Phenomenon: Analyzing Customer Awareness and Shifting Preferences Arnaz Kaizad Wadia and Nupur Rawal	83365-83372
058	A Review on Drug-Drug Interaction and Pharmacokinetic Studies of Metformin and Furosemide with Other Drugs. Rakshitha A and Rashmi N.G	83373-83384
059	Physico – Chemical and Phytochemical Analysis of Siddha Polyherbal Formulation – Megarajanga Kirutham S.P.Kopperundeivi, S.Sanathanakittu, M.N.Parandhaman, V.Sathiya and M.Thiruvalluvar	83385-83392
060	A Study on an Irregular Colouring of Sunlet and Pangraph Families G.Jothilakshmi, K.Rajam ² and A.Sathyakala	83393-83396
061	A Comprehensive Analysis of Glaucoma Detection using Machine Learning and Deep Learning : A Survey J. Karunanithi and S. Jagadesh Kumar	83397-83404
062	Bridging Heritage and Innovation in Sustainable Agriculture of India Prodip Kumar Sarkar	83405-83410
063	The Cardio Protective Potential of <i>Ficus arnottiana</i> Leaf Extract against Acute Myocardial Infarction in Rat Models Seema Sharma and Hemant Swami	83411-83419
064	Post-Partum Canine Mastitis in Golden Retriever Bitch Shaguneet Kour, N. Balaji, Sandeep Kour, M.S. Bhadwal and Neelesh Sharma	83420-83426
065	Investigating Environmental Education, Awareness, and Ethics among Teachers in Higher Primary Schools: A Case Study in Hassan District, Karnataka, India Yashwanth K L, Nithisha D, Rakshitha R, Chaithra N and Pallavi N	83427-83436
066	Morphometric Analysis of Krishnarajapete Watershed using Geospatial Techniques, Mandya District, Karnataka, India Shashi Kumar C and Nagaraju D	83437-83445
067	Design and Implementation of a Framework for IoT- based Smart Attendance Management System M. Chitra S. Namagiri , Praveen Rathod , Sasikala P, M. Elangovan and R Radha	83446-83456
068	Effect of Various Organic Fertilizers in Growth and Yield of Turnip (<i>Brassica rapa</i> L.) Under Low Hills of Uttarakhand Ashish Chand Ramola, Suneeta Singh and Anil Kumar Saxena	83457-83466

069	To Study the Relationship between Examination Stress and Changes in Eating Pattern among 18-25 y/o Students of Parul University Vishwa Pandya and Gayatri Parmar	83467-83473
070	Using Fuzzy Mathematical Modelling to Study Student's Mental Health During Exam Preparations T. Rajesh Kumar and B. Mohamed Harif	83474-83481
071	Industrial Plant Automation Management Best Practices for Great Outcomes Kashyap L Mokariya, Patel Snehal S, Ganesh R.Patil and Nikunj R Patel	83482-83494
072	Management of <i>Karappan</i> (Eczema) with Siddha Formulation Sivappu Ennai as External Application – A Case Report S.Malini, S.M.Chitra and M. Muthukumaran	83495-83498
073	Assessment of Developed Temperature Tolerant Yeast Strains for Fermentation Efficiency Ananthalakshmi Ranganathan, Shubhi Bagwat, Anjali Yadav, Seema Paroha, Sonali Nigam	83499-83511
074	Generational Differences with Respect to Perceived Social Support, Self-Esteem and Resilience Vrinda Antapurkar and Vaishali Choudhari	83512-83525
075	Impact Assessment of Static Waterbodies in Peri-Urban Areas: The Case of Kakori Town, Lucknow Arundhatee Mishra, Joydeep Dutta, Indrani Chakraborty and Subhrajit Banerjee	83526-83541
076	A Thematic Exploration of Insights and Reflections on E-Governance Adoption and Challenges in Anantnag, Jammu and Kashmir Aneesa Fayaz and P. Saravana Kumar	83542-83555
077	Human-Robot Collaboration - Optimizing Interaction in Industrial and Service Robots Harshini Manoharan, Raghavendran C R and K.Sutha	83556-83560
078	Impact of Organic Nutrient Management on Nutrients Uptake and Soil Nutrients Availability at Different Growth Stages of Kodo Millet S.Srinivasan, A.Angayarkanni, K.Dhanasekaran and R.Bhuvaneshwari	83561-83567
079	Study on Genotoxic Potential of Commonly used Herbicide on <i>Clarias batrachus</i> Subhashree Jagyanseni, Somanath Sahoo and Satya Narayan Sahoo	83568-83572
080	Assessment of Sleep Quality among the Patients Attending the Gastroenterology Department S.Ramachandran, Rudra Padmaja, Ramam Sripada, E.Umakanth, Nakka Santhi Kumari, Sara Behnami, Sahar Ghanbarzadeh and M.D. Dhanaraju	83573-83578
081	A Spectacular Appraisal on Megasaanthi Chooranam – A Cure to Ease Pain R.N.Hema, R.Gomathi, E.Preetheeka, T.Sasipriya and G.Tamilarasan	83579-83591
082	An Expandable AI Framework with Federated Transfer Learning and Homomorphic Encryption for Real-Time Intrusion Detection – Survey Gitanjali Chadha and K. Sutha	83592-83598

083	Extraction of Alginate from Brown Seaweed <i>Sargassum natans</i> and Its Potential Application as an Ecofriendly Biopolymer and Bioadsorbant P. Suchithra and C. Soundhari	83599-83606
084	A New Approach for Scalable Synchronization and Efficient Routing in Industrial IoT for WSNS: A Survey S.Deepa and B.Srinivasan	83607-83616
085	Unlocking Loan Approval : Leveraging Statistical Machine Learning for Informed Decision - Making in Banking D.Ramya and R.Subalakshmi	83617-83624
086	Health Status of Tribal Women in Tamilnadu: A Micro Level Study M. Krishnamoorthi	83625-83632
087	Coprime Edge Labeling of Graphs Janani R and Ramachandran T	83633-83641
088	A Study on Potted Plants in the Removal of Indoor Air Pollutants Nusrat Ali, Syed Aqeel Ahmad, Sohail Ayub and Saba Imdad	83642-83653
089	A DFT Study on Natural Sensitizer with Donor - π - Acceptor Architecture based on Luteolin for Applications in Dye - Sensitized Solar Cells X. Mary Josephine, R. Raj Muhamed and V. Sathyanarayanamoorthi	83654-83664
090	Factors Determining Energy Consumption of Urban Households in Madurai District R. Dilipan and S.Theenathayalan	83665-83671
091	Evaluating the Efficacy of Alum and Spirulina for Wastewater Remediation : A Comparative Analysis B. Thirumalaiyammal and P.F. Steffi	83672-83683
092	Evaluating Recent Developments in Cryptographic Algorithms Soumya Roy, Chhandak Manna and K. Kavitha	83684-83689
093	Role of Information and Communication Technology in Agriculture Extension Education Rajesh Ekka	83690-83695
094	Insights on Botanical, Pharmaceutical and Ethnopharmacological Aspects of <i>Ananus comosus</i> : A Review Sipra Banerjee, Banani Mondal, Shayeri Chatterjee Ganguly, Sanchari Talukder, Ramesh Kumari Dasgupta	83696-83704
095	A Review of the Bounds on the Spectral Radius and the Principal Eigenvector of a Graph in Terms of Various Parameters Bipanchoy Buzarbarua, Bikash Barman and Pallabi Bora	83705-83711
096	Blind People's Bus Route Identification System Neelam Raju, D Narasimha Rao, Bhukya Jailsingh and Kandukuri Kumari	83712-83716
097	Correlation Study between Particle Size and Raman Spectra for Nano Crystalline $Mg_x Mn_{1-x} Fe_2O_4$ prepared by Co Precipitation Technique K.G.Vyas, T.K.Pathak, P.K.Rathod, D.N.Panchotia, H.S.Bhutadia and A.K.Chaudhari	83717-83722

098	The Potential Application of R-Phycoerythrin Extract, an Antioxidant-Rich Red Algae (Rhodophyta) Along Gujarat Coast for Potential use in Cosmeceuticals Megha Shah, Indrani Bhattacharya and Anupama Shrivastav	83723-83729
099	Dynamic Power Optimization in Multi-Tenant Cloud Systems and Edge Computing S.Samundeeswari, J.Vandarkuzhali and J.Devika	83730-83739
100	A Real-Time System for Face Mask Detection and Ensuring Social Distancing Compliance Based on Deep Learning Puspita Dash and Susil Pani	83740-83751
101	Automated Driver Alert and Speed Reduction System for Sleep Detection Uma Parameswari S, Wilwin Joseph A and Shreemathi P	83752-83758
102	3D LiDAR Point Cloud Spatial Segmentation using Threshold and Cluster Methods A. Christoper Tamilmathi and S. Akshaya Varthini	83759-83765
103	Modified Homotopy Perturbation Approach of Analyzing Diabetic Complications K. Nandhini and M.Sumathi	83766-83776
104	Strategies for Ensuring Scalability and Fault Tolerance in Edge Computing Environments M.Valarmathi, N.Kowsalya and S.Sasipriya	83777-83783
105	Retinal Vessel Segmentation: A Concise Review of Approaches and Obstacles J. Jency and S. Shunmugan	83784-83791
106	Survey on Future Bill Prediction System in Electricity Consumption S. Suriya and Agusthiyar R	83792-83798
107	Identification of Human Diseases based on Symptoms using an Ensemble Machine Learning Algorithm G. Dheepa, V. Logeshwari and V. Sai prema	83799-83806
108	Audio Feature Extraction and Analysis using LibROSA Jahina,J, Kanishgaa. A and Bhaviyashree .M	83807-83813
109	Feature Extraction using Image mining Techniques C.K.Balaji	83814-83819
110	Progress in Communication: The Emerging Technologies Agalya VT Raj	83820-83823
111	Prediction on Cardiovascular Disease Using Deep Learning Algorithm S Anthony Mariya Kumari and Viji Vinod	83824-83830
112	Recent Advances in Cloud Computing Security Protocols: A Systematic Review and Analysis Nijitha PV and Varsha Ganesh	83831-83842
113	Cyber Intrusion Detection: A Systematic Review of Data Mining and Machine Learning Methods for Improved Threat Identification and Response Gowthami G and Kirubakaran N	83843-83850

114	Enhancing Crystal Clarity : Exploring L-Threonine Diglycine Picrate (LTDGP) for Advanced Nonlinear Optics R.Suganthi and K.Balasubramanian	83851-83561
115	Comparative Analysis of Risk Management Practices in Public and Private Sector Banks Amulya S and Saji George	83862-83867
116	Defending Your Trademark Rights : Protection Strategies J.Jeevaezhilan and K.Kathiresan	83868-83871
117	Eco-Innovation in the Market Place: Navigating Green Marketing for Sustainable Success Ayyappa L and A Jency Priyadharshany	83872-83881
118	Impact of Spiritual Intelligence on Burnout and Job Satisfaction of IT Employees Soumya S Nair and Rejoice Thomas	83882-83890
119	The Influence of Virtual Technology on Production Systems: An Evaluation of Workflow Improvement and Cost Reduction P. Praba Devi, D. Ganesan, R. Hemamalini, A. Ashwathi and V P Rameshkumaar	83891-83896
120	Synbiotics: Emerging Themes, Current Developments and Future Trends A Review Lekha A Reddy and T. H. Hema	83897-83905
121	An Economic Study on Rural Household Energy Consumption in Theni District M. Selvi, S.Karthikeyan and S. Senthilkumar	83906-83910
122	Management of Subclinical Hyperthyroidism through Ayurveda: Case Report Alka Yadav, Sarita Yadav and Vipin Tanwar	83911-83915
123	On Some Properties of Summability in Arithmetic - Geometric Series G. Shailaja and R. Sivaraman	83916-83924
124	Optimizing Water Hyacinth Compost and Chicken Manure for Enhancing Spinach Growth: An Eco-Friendly Approach to Sustainable Agriculture Mahmuda Parveen and Sujit Ghosh	83925-83937
125	An Improved CRITIC-MULTIMOORA Approach for Kidney Transplant under Pythagorean Neutrosophic V. Surya, R. Seema and R. Sophia Porchelvi	83938-83946
126	Petrography and Geochemistry of NNW-SSE Trending Dolerite Dykes around Piriapatna Taluk, Mysore District, Karnataka Nibiya N.T, B.V.Suresh Kumar, Nagendra P, Samarth Urs M and K.N.Prakash Narasimha	83947-83957
127	HPTLC Method Validation of Antidiabetic Drugs - A Short Review M.K.Vijayalakshmi, T. Akshaya, B.Amirtha Lakshmi, C.Priya Dhaarani, S.Sakthi ² , and S.Sowmiya	83958-83975
128	Analyzing Agricultural Data using Inverse Lindley Distribution with Fuzzy Parameters S. Sujatha, A. Dinesh Kumar and M. Vasuki	83976-83985

129	The Design and Development of Surgical Nurse Assistance Robotic System by using AI with MSN Network M. Senthilkumar, K. Shanmugasundaram, A.T. Rajamanickam and N. Nandakumar	83986-83995
130	Heavy Metal Analysis of Siddha Poly Herbal Formulation Karanthai Chooranam M.SriSakthiLogisha, G.Nivetha, M.Mohamed Mustafa, T.R.Siddiq Ali, N.J. Muthukumar and V.Mahalakshmi	83996-84001
131	A Review on the Effect of Advanced Glycation End Products on Adolescents Juhi Punjabi and Sarala Premkumar and A. J. Hemamalini	84002-84011
132	Lab Scale Study of Catalytic Degradation Kinetics for Textile Dye : Tetrazine Bhadreshkumar R Sudani	84012-84018
133	A Numerical Study on the Flow of Oil-based Fuzzy Hybrid Nanomaterial Stretching Cylinder by Modified Buongiorno's Model P.Asaigeethan, K.Vaithiyalingam and N. Deepa	84019-84031
134	Isolation, Identification and Bioprofiling of Endophytic Fungi from <i>Piper schmidtii</i> Mohana M, Saritha E , Nivetha L and Lakshmi Ajit	84032-84039
135	Mechanical Properties of Engineered Cementitious Composites Enhanced by Glass, Polyester Fibers and <i>Bacillus licheniformis</i> : An Experimental Approach Vipul Solanki and Khadeeja Priyan	84040-84046
136	Social Life of Blacks in Claude McKay's <i>Home to Harlem</i> Bairavi B and R. D. Prashaanth	84047-84053
137	A Methodology to Propose Neutrosophic Basic Probability Assignment in Neutrosophic Evidence Set D. Leonita and R. Irene Hepzibah	84054-84062
138	Detergent Activity of Aqueous Extract of Croton <i>Bonplandianus</i> Baill - Possible Source of Natural Surfactant Renugadevi R, Geethalakshmi Sundararaman, Kiruba M and Divya M	84063-84069
139	Isolation of Bioactive Compounds from <i>Streptomyces griseus</i> DR38 Devi E ^{1*} , Bharathidasan.R ² and Thiruneelakandan G	84070-84074
140	Antidiabetic and Antihyperlipidemic Efficacy of Veratric Acid in Streptozotocin - Nicotinamide Induced Wistar Rats John Anbumani Ganesan, R.Kowsalya and S.M. Sivasankaran	84075-84083
141	Antioxidant and Antiglycation Properties of <i>Syzygium aromaticum</i> bud: Potential Therapeutic Applications in Diabetes Management Piyushkumar N. Chudasama and Kinnari Mistry	84084-84091
142	GC-MS Analysis of <i>Canscora alata</i> (Roth) Wall- a Potent Medicinal Plant S.Kavuthami and G.Jayanthi	84092-84118
143	On Solving Neutrosophic Linear and Nonlinear as a Neutrosophic Fuzzy Linear Complementarity Problem N. Sudha and R.Irene Hepzibah	84119-84126

144	Nutritional Factors in the Prevention and Management of Chronic Kidney Disease Kalyani U. Chande; Snehal T. Hase, Shweta A. Ukarande and Komal Kalnar	84127-84147
145	The Heavy Metal Pollution is Detected by Fish as a Bioindicator M. Elavarasi and B. Aruljothi	84148-84162
146	Deciphering Molecular Docking Studies of Phytoconstituents Identified in Polyherbal Siddha Formulation <i>Sathakuppai Kudineer</i> on HMG coA Reductase – An Enzyme Target for Anti-Hyperlipidemic Activity R S Parvathy, T Susmitha , I Sundara Ganesh A Mariappan and G Senthil Vel	84163-84175
147	Preliminary Phytochemical Screening and <i>In vitro</i> Antioxidant, Anti diabetic and Anti Mitotic Activity of Methanolic Extracts of <i>Hyophorbe lagenicaulis</i> Fruits Kanakaraju Addipalli, Siri Varshini R, R Bhargavi, Sumayya Siddiqui, T Sai Sanjana and T Kavya	84176-84181
148	Preliminary Phytochemical Screening and <i>In vitro</i> Pharmacological activities of <i>Hymenocallis littoralis</i> Aruna Kumari, R Pooji Sravanthi, S Manasa, R Surya Mohith, R Kaveri and S M Priyavarshini	84182-84187
149	Development and Characterization of Tooth paste Containing Casein Microspheres Konthala Rajesh, P.N.Mallikarjun, Donka Devaki, Yadlapalli Manogna, Alluri priya and Sekharamantri Vineela	84188-84194
150	Impact of Dolutegravir on Weight Gain Saritha Medapati, Blessy Jayamon, Bindu Krishna Kosireddy, Bhagya Sri Palisetty, Apoorva Pinisetty and Chinta AshishManohar	84195-84201
151	Anomaly Detection in Networks using Machine Learning Techniques Routhu Daswanta Kumar, Manjula Bammidi and Routhu Shanmukh	84202-84207
152	Enhancing EEG Based Epileptic Seizure Prediction through Deep Learning and Channel Optimization Techniques Botcha Kishore Kumar, K. N. Brahmaji Rao and C H.Bindu Madhuri	84208-84215
153	Review on Natural Idempotent Pair in Ternary Semiring B. Deepan and S. Anbalagan	84216-84224
154	Empowering Rural Communities with the Integration of IoT and Machine Learning Routhu Shanmukh, Jyosyula Harini Nayana, Routhu Daswanta Kumar and CH Nooka Raju	84225-84229
155	Controlled Drug Release Delivery Systems: A Comprehensive Review Rama Rao Bora and Satyalakshmi Siragam	84230-84234
156	A Peer Review on High Performance Liquid Chromatography Rajkiran Kolakota, Mudadla Pavani, Chala Jaithri and Akasapu Sahukara Divya	84235-84239

157	Design and <i>In vitro</i> Characterization of Extended Release Tablets of Anti Epileptic Drug Sravani Boyapati, A. Nanaji and B. Pavan Teja	84240-84245
158	Enhancing Block Chain Security with MI - An Intelligent Approach to Fraud Detection and Consensus P.S.G Aruna Sri,G. Madhavi and CH Nooka Raju	84246-84252
159	Assessing the Impact of Symptom Severity on Quality of Life in Thyroid Patients Urmila Gorle, Gopisetty Akhila and Sharmila RaniKalamata	84253-84263
160	Preliminary Phytochemical Screening and <i>Invitro</i> Pharmacological Activities of <i>Limonia Acidissima</i> Fruits Gana Manjusha Kondepudi, S. Navya Sri, S. Alekhya, S.Yamini, Shaikh Mohmad Ashraf, T. Pavan Teja and V. Ashrith	84264-84271
161	Uncovering Cancer Data Insights: State-of-the-Art Machine Learning Methods for Data Analysis Varanasi Avinash, Gantyaada Amaladevi, Lakshmana Rao Battula and Usha Matta	84272-84277
162	Production, Optimization and Partial Purification of Amylase from the <i>Bacillus megaterium</i> for the Removal of Biofilm Tulsi Barot and Meghna Diarsa	84278-84291
163	Linezolid - Induced Serotonin Syndrome in Clinical Practice: A Comprehensive Review Vinod Kumar Mugada, Benarjee Veera Mani Kishore Boddeda and Vanka Vidhya Sree	84292-84303
164	Enhancement in Solubility and Dissolution Rate of Glimepiride using Spherical Crystallization Technique Rajkiran Kolakota, Simma Sridhar, Darapu Harika and Devudala Soujanya	84304-84309
165	Vesicular Drug Delivery System: Site Specific Drug Delivery Approach Uriti Sri Venkatesh, Gulibindala Ekshitha, Kanchari Vidyamansa and Akkarapalli Bindu	84310-84316
166	Comprehensive Analysis of Blood Cell Morphology and Classification using Advanced Open CV Techniques Enhancing Diagnostic Precision and Automating Routhu Daswanta Kumar, Sridevi Sakhamuri, G.Madhavi and CH Nooka Raju	84317-84326
167	Effect of <i>Euphorbia neriifolia</i> against Hemorrhoids: a Review Alok Kumar Moharana, Jyotirmaya Sahoo, Nikita Pradhan, Silky, Priya Kumari, Shurbhi Kumari and Anshu Kumar Singh	84327-84334
168	Balancing your Biome for Better Mental Health: Gut Microbiota and Depression Vinod Kumar Mugada, Koyya Priyadarshini Reddy, Konathala Rajesh and Madhura Anusha	84335-84348
169	M/D/1 Queuing Model with Picture Fuzzy Set V.Chitra and B. Maheswari	84349-84365

170	Preparation and Evaluation of Polyherbal Tea Bags with Anti-Oxidant Activity for Management of Oxidative Stress Ch.Nooka Raju, S Bala Chandrika, J Ramya and Ponnamp Chiranjeevi	84366-84376
171	Molecular Docking Investigation into the Hepatic Effects of Cyclooxygenase and CYP2E1 by the Methanol Extract of <i>Padina gymnospora</i> in Male Albino Wistar Rats Tanima Debnath Sarkar, John Anbumani Ganesan, A. Therasa Alphonsa and M. Muthulingam	84377-84390
172	Drug Solubility: Importance and Enhancement Strategies Rajkiran Kolakota, Chandaka Haribabu, Pasala Priyanka and Akasapu Sravankumar	84391-84399
173	High Performance Liquid Chromatography for the Development and Validation of Meropenem and Vaborbactam Mounik Sai Kumar N, Chiranjeevi Ponnamp, Sridevi Ranjitha Karanam and CH.Nooka Raju	84400-84411
174	Innovative ML Methods for Automatic Blood Cell Images Analysis and Labeling: Improving Medical Imaging Diagnostic Precision with Extracting Features and Classification Approaches Routhu Shanmukh, Venkateswara Reddy B, Rowthu Neelima, Yerravarapu Durga Prasad and CH Nooka Raju	84412-84416
175	Formulation of Geomatrix Extended Release Tablets of Metformin HCl using CO Processed Gums Ponnada Sowmya , Konathala Rajesh, Ch.Nooka Raju and P.N.Mallikarjun	84417-84423

Editorial...



Global average temperatures in 2024 are warmer than in 2023. For 16 consecutive months (June 2023 to September 2024), global average temperatures are merely higher than previously recorded, According to a combined analysis of WMO (World Meteorological Organization) datasets, meteorologists forecast today. The WMO has again issued a red alert warning that climate change is accelerating due to the continued rise in greenhouse gas emissions in the atmosphere. The study found that the decade from 2015-2024 has seen significant warming, accelerating ice loss from glaciers, sea level rise and ocean warming. Extreme weather variability is wreaking havoc on societies and terribly impacts the economies around the world. "Climate disasters are affecting health, widening inequalities, undermining sustainable development and deflating the foundations of peace. The most vulnerable are significantly suffering," said UN Secretary-General António Guterres. However, it is important to recognize that every part of the warming. Whether below or above 1.5 degrees Celsius, every additional raise in global warming increases climate extremes, impacts and risks," he said. The COP29 report, released on the first day of the UN Climate Change Conference in Baku, Azerbaijan, clearly shows that the objectives of the Paris Agreement are at great risk. The record we have seen in different parts of the world this year, with heavy rains and floods, rapidly intensifying tropical cyclones, deadly heat, persistent droughts and raging wildfires, is a harbinger of our future," said WMO Secretary-General Celeste Salo (First female SG of WMO) . She insisted that the temporary exceedance of 1.5 degrees Celsius in monthly and annual warming that we have failed to meet the Paris Agreement goal of keeping the long-term global average surface temperature increase to 2 degrees Celsius above pre-industrial levels. It is essential to improvise efforts to limit warming to 1.5 degrees Celsius, especially at pre-industrial levels.

We need to reduce greenhouse gas emissions rapidly and strengthen our monitoring and understanding of the changing climate with scientific and technological support. It is also necessary to increase the means of communicating climate change through climate information services and early warnings to all through modern research. The current warming of about 1.3°C compared to the years 1850-1900 is also considered to be an early sign of long-term global warming. The estimated global average surface air temperature from January to September 2024 was 1.54°C. According to an analysis of six international datasets, WMO found the warming was increased by the El Niño event. Natural disasters such as heavy rainfall, floods and tropical cyclones have led to loss of lives and damages. El Niño has also caused prolonged drought in several areas. Millions of people around the world are facing food insecurity and shortages, health problems, and infectious diseases, which are leading to wide human migration.

The concentration of carbon dioxide (CO₂) in the atmosphere has risen by 51%, i.e. 278 ppm in 1750 to 420 ppm in 2023 that traps heat and increases temperatures. In the past five years, advanced scientific and technological services have been used to detect climate change and prevent loss of lives and properties. WMO has called for further improvements in life-saving early warning systems by 2027 to ensure the inclusive protection from hazardous weather. It is expected that most of the universities, research institutes and colleges will conduct research in the upcoming years to reduce and control disaster damage caused by climate change. Only when government inducts programs that focus on biodiversity, water conservation, natural resource management, and soil conservation combined with public cooperation we can achieve complete success in combating climate change.

Editor, IJONS

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