

TABLE OF CONTENTS

PREFACE	i
MESSAGE FROM RECTOR OF SYIAH KUALA UNIVERSITY	ii
TABLE OF CONTENTS	iv
PURE MATHEMATICS AND COMBINATORICS	
Notes on 2-Exponents of Two-Colored Lollipops <i>Saib Suwilo</i>	1
Constructing Graph of Order Multiple $2n + 1$ and Diameter n <i>Yus Mochamad Choliy</i>	11
APPLIED MATHEMATICS	
On the Soliton Solution of the Korteweg-de Vries Equation <i>Marwan, Fatmawati, Siti Rusdiana and Ichsan Setiawan</i>	15
Preparedness to Tsunami Attacks Reduced the Victims <i>Masimin</i>	23
Austrostipa Classification Based on Non-Molecular and Molecular Data <i>Betty Mauliya Bustam</i>	28
Vegetation of Mangrove Forests Determine the Natural Stability of Coastal Ecosystem <i>Feri Suryawan</i>	33
Logistic Models for the Growth of Candida Tropicals RETL-Cr1 <i>P. Mohd Tuah, D. Gabda & J. Sulaiman</i>	40
Analysis of Joint Reactions : Using Aided Moment Method (AMM) <i>Teuku Edisah Putra</i>	49
Genetic Algorithm in Variable Amplitude Loading Based on Clustering Technique <i>Darahim, Zulkipli, Shahrum, Azami</i>	55
Barrier Method in Linear Programming Problem <i>Parwadi Moengin</i>	61
Hibridization of Evolution Algorithm and Local Search Algorithm in Solving Multi-Objective Travelling Salesman Problem <i>Nurmaulidar</i>	67
Fuzzy Pareto Optimality Method to optimize multi objective examination timetabling problems <i>Taufiq Abdul Gani</i>	73
Mode of Action and Toxicity of Chromium to Freshwater Fish, <i>Oryzias latipes</i> <i>Suhendrayatna, Elvitriana</i>	87
Repellency of Bioactive Compound from Vitex Trifolia to Mosquito <i>Mustanir and Rosnani Nasution</i>	94



The propagation constant in waveguides with Maxwell-Harmuth equation's <i>Gunawati</i>	98
Coupled Analysis for Optimum Design of Foundations <i>Abdul Hakam</i>	102
New Coral Recruitment after Tsunami in Teluk Pelabuhan and Teupin Layeun Iboih Reefs, Sabang, Weh Island <i>Muhammad Nasir, Dahlan</i>	109
The Effect of Manure and Gypsum on the Growth and Product of Corn (<i>Zea mays</i> L.) <i>Lenni Fitri, Essy Harnelly</i>	113
Response of Soybean Plant on Excess Manganese Model and Toxicity Symptoms <i>Rosmaidar Dj</i>	118
3D Reconstruction and Analysis of Trabecular Bone using Visualization and Modeling Technique <i>Yuslinda Mad Yusop, Habibollah Haron, Mohammed Rafiq Abdul Kadir</i>	126
Mechanically alloyed of magnesium hydrides for hydrogen energy storage materials <i>Adi Rahwanto, Fauzi Saleh, Zulkarnain Jalil</i>	132

COMPUTER SCIENCE

Challenges in Handwritten Jawi Character Recognition <i>Mohammad Faidzul Nasrudin, Elmi Mahzum</i>	136
Distributed Mutual Exclusion Algorithms using Queue and Stack Structures of Processes <i>Armin Lawi</i>	145
Newton Iteration Based on Heronian Mean <i>M. Imran</i>	151
The Influence of Biorthogonal Wavelet Transform and Different Coding Method to Quality of Image Compression <i>Muhammad Arhami, Emi Setyaningsih, Raisah hayati</i>	157
The Accuracy of Heuristic Formula to Calculate Dejittering Delay Over Packetized <i>Yassir, Rusli</i>	164

STATISTICS

Workability Modeling of Self Compacting Concrete using Support Vector Regression <i>Yoyok Setyo Hadiwidodo, Sabarudin bin Mohd, Santi Wulan Purnami</i>	172
Multivariate Latend Variable Model for Longitudinal Analysis of Binary Response Data for Identifying the Effects of Different Treatments on Responses and Correlation Structure <i>Z. Rezaei Ghahroodi, M. Ganjali</i>	179
Comparing Means of Promotion Rate and Survival Rate Between Male and Female for Primary School in SC Districts Working Area using Sample Mean Comparison for Independent t-Test <i>Fahmi</i>	185
Conjoint Analysis of Student Preference upon Lecture Atributes <i>Evi Ramadhani, Meina Devi Ani, Asep Rusyana</i>	192

Identification of Nutrition Status based on Body Mass Index (BMI) for Acehnese Population after Tsunami <i>Sofia, Asep Rusyana, Evi Ramadhani</i>	200
Bera-Jarque Normality Test For Residue in Autoregressive Model of Clean Water Debites from PDAM-Banda Aceh <i>Marzuki, Melviana Sari, Zurnila Marli Kesuma</i>	204
The Development of Interactive Statistical Learning with R Software <i>Hizir Sofyan, Miftahuddin, and Muhammad Subianto</i>	211
Determining Effectiveness of Start and Improvement Your Business (SIYB) Training Based on Districts and Gender in Aceh <i>Muslim</i>	216
EDUCATION MATHEMATICS	
Number Sense of Preservice Primary Teacher <i>Mohini Mohamed, Zulkifli, Jasmaniah</i>	222
Using Computer as a Tool in Abstract Algebra <i>I Made Arnawa</i>	229
The Effects of Different Four Instructional Methods on the Ability to Communicate Mathematical Reasoning of The SMP Students <i>Bansu I. Ansari</i>	234
The Introduction of Coordinate Concept by Realistic Approach <i>Rahmah Johar</i>	240
The Effort to Help Elementary Students in Understanding the Concept of Fraction through the Implementation of Cooperative Learning <i>Erni Maidiyah</i>	246
LIST OF PARTICIPANT	253