

Table of Contents

Volume 18, Issue 10 — October 2024

Research Articles

1.

Combinatorial Testing Methods for Early Fault Detection in Software Systems

Abdul Rauf, Madhusudhana Reddy

Keywords: combinatorial testing, software systems, fault detection, model-based testing, test plan generation

2.

Reviewing the Links Between Desertification and Food Insecurity: From Parallel Challenges to Synergistic Solutions

L. Stringer

Keywords: desertification, food insecurity, livelihoods, vulnerability, integrated interventions, socioeconomic drivers, biophysical drivers

3.

Comparing the Effect of Two Types of Aerobic Exercise on Castelli Risk Index of Sedentary Female Adults

H. Ehtaram, A.R. Sharif, A. Behzare, M. Sayyah

Keywords: Aerobic Exercise, Castelli Risk Index, Sedentary Lifestyle, Lipid Profiles, Cardiovascular Health

4.

Introducing Mathematical Theory of Development

Viktor Ivanov, Sergey Girlin

Keywords: mathematical models, systems theory, developmental biology, optimization, complex systems

5.

Small Ruminant Brucellosis and Public Health Awareness in Two Districts of Afar Region, Ethiopia

Anteneh Hailu Tegegn, Aklilu Feleke, Wesinew Adugna, Simenew Keskes Melaku

Keywords: Brucellosis, Public Health, Epidemiology, Zoonotic Diseases, Afar Region, Risk Factors, Seroprevalence

6.

Nested PCR Assay for the Rapid Detection of *Naegleria fowleri* from Swimming Pools in Egypt

Wafaa Mohamed Hikal, Mohamed Dkhil

Keywords: Naegleria fowleri, Nested PCR, Swimming Pools, Egypt, Free-living Amoebae

7.

Evaluation of Radial Basis Functions in Fuzzy Interface Models for Predictive Training and Testing

Zahid Hafeez Khokhar, Elena Kowalczyk

Keywords: Fuzzy Logic, Radial Basis Function, Predictive Modeling, Simulation, Artificial Intelligence, Triangular Membership Functions, Data Training