

## RUSA 2.0 - THEME BASED RESEARCH PROJECT

### 4.4.1 - Physical Sciences: Advanced Nanomaterials for Sustainable Energy and Sensor Applications

Sl.No.	Name of the Department	Research Area
1	Bioelectronics & Biosensors	Development of Chemo-biosensors for Bio-medical, Food and Environmental applications, Electronic nose for Breath Analysis.
2	Chemistry	Advanced Nanomaterials in Sustainable Energy, Green Chemistry and Healthcare
3	Nanoscience & Technology	Nanotechnology for Display Paneling, Green Energy, Bio imaging and Sensing for Medical Applications, Solar Hydrogen Production
4	Physics	Design and Fabrication of advanced Devices such as Optical Memories, Scintillation Detectors, Rechargeable Batteries and Sensors using Crystals, Polymers and Thin films, Hydrogen Storage Materials
5	Energy Science	Developing new materials for alternative energy production and storage by eco-friendly approaches

### 4.4.2 - Biological Sciences: Translational Health Research for Human, Animal and Plant Systems

Sl.No.	Name of the Department	Research Area
1	Biotechnology	Translational Health Research for Human and Plant Systems
2	Microbiology	Health Perspectives, Bioenergy and Bioremediation for the Human Welfare
3	Animal Health and Management	Pharmaceuticals for Eco-friendly control of Life threatening Diseases of Animals
4	Bioinformatics	Experimental and Computational Drug Discovery Studies for Life Threatening Diseases
5	OCAS	Conservation and Sustainable Development of Marine resources in Palk Bay to strength the biodiversity assessment, protection and conservation of the resources
6	Botany	Biosynthesis and Phyto-Chemical Analytics for cancer and other diseases
7	Biomedical Sciences	Exploration of novel leads for Biomedicines from Bio-resources
8	Fisheries Science	Fisheries Science

#### 4.4.3 - Rural Informatics Centre

Sl.No.	Name of the Department	Research Area / Sub Themes
1	Nodal Centre (RICE)	Preparation of Thematic maps, Interlinking of collected data through GIS
2	Geology	Natural Resources & Disasters
3	Social Work	Rural Housing, Electricity, Transport, health and Human Resources
4	Tourism & Hotel Management	Tourism and Development
5	Women Studies	Women Sector
6	Animal Health and Management	Animal Husbandry
7	Banking Management	Banking sector
8	Alagappa Institute of Management	Entrepreneurship
9	Education	Education Sector (School Level)
10	Special Education	Education Sector (College Level)
11	History	Archaeology and History
12	Economics	Agriculture and Irrigation
13	Computer Science	Information Model

#### 4.4.4 - Mathematical Sciences: Mathematical Modelling and Computational Intelligence

Sl.No.	Name of the Department	Research Area
1	Mathematics	Mathematical modeling
2	Computer Science	Big Data and Machine Learning
3	Computer Applications	Bio-metric based Security, Image processing and Health Care System
4	Computational Logistics	Cloud Security and Cryptography

#### 4.4.5 - Micro - irrigation; Energy use for co2 reduction

Sl.No	Name of the Department	Sub Themes
1	Department of Economics and Rural Development	Micro-irrigation, Energy Use and CO 2 Reduction Nexus: A Study of Different Crops from Selected States in India

#### 4.4.6 – Arts: Advanced Social and Linguistics Studies

Sl.No	Name of the Department	Sub Themes
1	Department of Tamil	Temple Architecture and the Tamil Society
2	Department of English and Foreign Languages	Development of Multimedia Package for Teaching Novels
3	Centre for Tamil Culture	Encyclopedia of Tamil Culture
4	Department of Women's Studies	Health Status In Tamil Nadu : A Gender Analysis
5	Department of Social Work	Addiction of Social Media
6	Department of Library and Information Science	Creation of Human and Institutional Resource Database of Indian Social Science Scholars
7	Department of History	Keeladi Archaeological Excavation
8	Department of Fine Arts	Documentation of National and Regional Dance and Music and Digital Reconstruction

#### 4.4.7 – Education: Transition in Cognitive, Affective and Psychomotor Domains of Learners

Sl.No	Name of the Department	Sub Themes
1	Education	Open Educational Resources
2	Physical Education and Health Sciences	Yoga and Meditation for Peace and Prosperity
3	Life Long Learning	Development and Validation of Technology Enabled Modules in Pedagogy
4	Special Education and Rehabilitation Science	Universal Design Strategies and Assistive and Adaptive Devices for People with Disabilities
5	Alagappa Institute of Skill Development	Skill Gap Analysis in Apparel and Software Industries
6	Education (DDE)	Development and Validation of Technology Enabled Modules in Pedagogy
7	Alagappa University College of Education (AUCE)	Capacity Building in Neuro Education
8	Alagappa University College of Physical Education (AUCPE)	Yoga and Meditation for Peace and Prosperity

#### 4.4.8 – Management: Integrated Management approach for Sustainable Social Development

<b>Sl.No</b>	<b>Name of the Department</b>	<b>Sub Themes</b>
1	Alagappa Institute of Management	Entrepreneurship for Sustainable Growth
2	Logistics Management	e-Logistics and Supply Chain Management
3	International Business	Big Data Analytics on Foreign Capital Inflows
4	Commerce	Industry Linkage and Industrial Park
5	Corporate Secretaryship	Social Development through Corporate Social Responsibility (CSR)
6	Banking Management	Efficacy of E-Payments and Settlement Systems in India
7	Tourism and Hotel Management	Sustainable Tourism and Hospitality Research