### JMJ COLLEGE FOR WOMEN (AUTONOMOUS), TENALI

## POLICY ON APPLYING TECHNOLOGY TO BUILDING STANDARDS FOR MINIMIZING WATER USAGE

#### 1. Purpose

This policy aims to integrate advanced technologies into building standards at JMJ College for Women (A), Tenali, to minimize water usage, promote sustainability, and enhance water efficiency in campus infrastructure.

#### 2. Scope

This policy applies to all buildings within the college premises, including academic blocks, hostels, laboratories, canteens, and landscaping areas.

#### 3. Objectives

- Implement water-saving technologies in existing and new constructions.
- Optimize water consumption through smart infrastructure.
- Promote sustainable water management practices.
- Ensure compliance with environmental sustainability standards.

### 4. Technology Integration in Building Standards

### 4.1. Water-Efficient Fixtures and Appliances

- Install low-flow faucets, aerators, and automatic shut-off taps to reduce water wastage.
- Use dual-flush and low-flow toilet systems to optimize water usage in restrooms.
- Implement water-efficient dishwashing and laundry systems in hostels and canteens.

### 4.2 Smart Water Management Systems

- Deploy automated water meters to monitor and analyze consumption patterns.
- Utilize leak detection sensors to prevent water loss and ensure timely maintenance.
- Implement IoT-based water management system (uses sensors and other devices to monitor water quality, usage, and flow) to control and optimize water flow.

# 4.3 Rainwater Harvesting and Recycling

- Enhance rainwater harvesting systems for storage and groundwater recharge.
- Utilize harvested rainwater for non-potable purposes such as flushing and irrigation.
- Implement Greywater (collect, treat, and reuse wastewater from showers, sinks, washing machines, and dishwashers) recycling systems for reuse in gardens and cleaning purposes.

4.4 Sustainable Landscape Practices (Autono

Principal

LMJ. COLLEGE FOR WOMEN (Autonomous)

TENALI - 522 202

- Adopt drip irrigation and sprinkler systems to reduce water consumption in green spaces.
- Utilize native and drought-resistant plants that require minimal watering.
- Implement permeable pavements and rain gardens to facilitate water absorption.

### 5. Implementation and Compliance

- The administration will ensure adherence to water-efficient building standards.
- The Water Management Committee will oversee implementation and compliance.
- Regular audits and reviews will be conducted to assess efficiency and improvements.

#### 6. Awareness and Training

- Conduct workshops and training for staff and students on water-saving technologies.
- Display informational signage promoting best practices in water conservation.
- Engage in collaborations with technology providers for continuous improvement.

#### 7. Review and Amendment

This policy will be reviewed annually, with updates made as necessary to incorporate new advancements in water-saving technologies.

aaa

STATE OF TENALL STATE OF THE ST

M.J. COLLEGE FOR WOMEN (Autonomous)
TENALI - 522 202