**Certificate course on Rain Water Harvesting and Management**

Water is one of the most essential substances for all human activities and long term sustainability of eco-system. An efficient planning and development of various water resources need to be undertaken by taking long term national perspective. In order to overcome the recent water scarcity problem, rain water harvesting from agricultural and rooftop catchments are essential.

During the training programme, students have been exposed to various aspects of water harvesting and management in general and roof top water harvesting in particular. Therefore, a considerable emphasis has been laid on practical hands-on exercises.

**Syllabus (2019-2020)**

**Chapter I**

Introduction

Water Resources

Sources of fresh water

Ground water irrigation

Water pollution

Ground water pollutions and it sources

Treatment of Pollution

**Chapter II**

Introduction

Rain water Harvesting and its needs

Water treatment measures

(i) Conventional system

(ii) Household water treatment system

(iii) Filtration

(iv) Disinfection

**Chapter III**

Introduction

Water harvesting techniques

Rooftop rain water harvesting

**Chapter IV (Practical Training)**

Introduction

Experiment I: Rooftop water harvesting from a household

Experiment II: Rooftop water harvesting from a group of houses

Experiment III: Storage capacity of water storage structures (Rectangular and cylindrical)

Experiment IV: Rainfall measurement

Experiment V: Ground water level measurement

Course Coordinators

Lt.Dr.Indulal C.R. & Mrs. Rejani V. Koshy

(Department of Physics, St.Gregorios College, Kottarakara)