ST. JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

B.SC.(HONORS) AGRICULTURE AND RURAL DEVELOPMENT WITH SINGLE MAJOR

# II SEMESTER **AGRICULTURE AND RURAL DEVELOPMENT** Time: 30hrs/week

AGRD 103P(1)  **AGRO METEOROLOGY AND CLIMATIC CHANGES** Marks:50

## w.e.f AK 2023-2024 (Admitted batch) PRACTICAL SYLLABUS

**OBJECTIVES:**

* To study about climatic resources of a given area for effective crop planning.
* To study about crop weather relationship.
* To understand the roles of Agro meteorology agriculture.

**Course Outcomes:**

**CO1:** Classify Earth atmosphere, composition, extent and structure; Atmospheric weather variables; Atmospheric pressure, its variation with height.

**CO2:** Explain Nature and properties of solar radiation, solar constant, depletion of solar radiation, short wave, long wave and thermal radiation, net radiation, albedo.

**CO3:** Discuss about Atmospheric humidity, concept of saturation, Artificial rainmaking andtypes of weather forecast and their uses.

**EXPERIMENTS:**

1. Visit to Agrometeorological Observatory, site selection and layout plan for observatory. **(4hrs.)**

2. Exposure to agrometeorological instruments and weather data recording.**(4 Hrs.)**

3. Measurement of albedo and sunshine duration. **(4 Hrs.)**

4. Computation of radiation Intensity using bright sun shine hours. **(4 Hrs.)**

5. Tabulation of maximum and minimum temperatures, trend and variation analysis for climate change of the region. **(2 Hrs.)**

6. Measurement of soil temperature and computation of soil heat of lux **(2 Hrs.)**

7. Determination of atmospheric pressure and vapour pressure. **(2 Hrs.)**

8. Determination of relative humidity. **(4 Hrs.)**

9. Determination of dew point temperature - Measurement of atmospheric pressure and analysis of atmospheric conditions. **(4 Hrs.)**

\*\* \*\* \*\*