# GOVERNMENT COLLEGE (AUTONOMOUS), RAJAMAHENDRAVARAM **DEPARTMENT OF GEOGRAPHY**

#### **SYLLABUS**

# SECOND YEAR B.A. /B.Sc. SEMESTER – III PAPER - 3: PHYSICAL GEOGRAPHY-II

#### CLIMATOLOGY AND OCEANOGRAPHY

#### **Unit-I**

- 1. Weather and Climate; Origin, composition and structure of atmosphere.
- 2. Insolation, Horizontal and vertical distribution of temperature, inversion of temperature.

#### Unit-II

1. Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon and Local winds.

#### **Unit-III**

1. Humidity- measurement and variables, evaporation, condensation, precipitation forms and types and distribution. Climate classification by Koppen

#### **Unit-IV**

1. Configuration of oceanic floors, Temperature and Salinity of ocean.

#### **Unit-V**

- 1. ocean currents
- 2. Tides, waves of oceans oceanic resources.

#### **Suggested Readings:**

- 1. Barry, RG and Chorley R.J., Atmosphere, Weather and Climate, Routledge, 1998.
- 2. Critchfield, H., General Climatology, Prentice-Hall of India, 2002.
- 3. King, C. Oceanography for Geographers, Edward Arnold, London, 1975.
- 4. Trewartha, GT: An Introduction to Climate, Mc-Graw Hill, New York, 1981.
- 5. Trewartha, G.T., The Earth's Problems Climates, University of Wisconsin Press, USA.

### ADDITIONAL TEXT BOOKS:

- 1. Ghosh .B.N.(1995) Fundamentals of Population Geography- Sterling publishers-BANGALORE.
- 2.Bhende A.A. and Kanitkar. T (2006) Principles of Population studies. Himalaya publishing House . HYDERABAD.

# GOVERNMENT COLLEGE (AUTONOMOUS), RAJAMAHENDRAVARAM DEPARTMENT OF GEOGRAPHY

# PRACTICAL SYLLABUS SECOND YEAR B.A./B.Sc. SEMESTER – III

## PRACTICAL PAPER - 3: Representation of Climatic Data

- 1. Collection of Climatic data.
- 2. Representation of temperature and rainfall.
  - (i) Line and Bar Graph 1 Exercise.
  - (ii) Distribution of temperature (180-isotherms) 1
  - (iii) Distribution of rainfall (180 isohyets) 1
  - (iv) Hythergraph 1
- 3. Climograph (wet and dry places) 2 Exercise.
- 4. Weather map symbols and Interpretation (January & July) 2

#### **Suggested Readings:**

- 1. Singh, R.L., 1979. Elements of Practical Geography, Kalyani Publisher, New Delhi.
- 2. Gregory S. 1963. Statistical Methods and the Geography, Longman, London.
- 3. Khan, A.A. 1996. Text Book of Practical Geography, Concept, New Delhi,.
- 4. Lawarence, GRP1968. Cartographic Methods, Methuen, London,.
- 5. Monkhouse, F.J. and Wilkinson, H.R1994. Maps and Diagrams, Methuen, London,
- 6. Pal. S.K. 1998: Statistics for Geoscientist- Techniques and Applications, Concept Publication, New Delhi,.
- 7. Sarkar, A.K 1997: Practical Geography-A Systematic Approach, Orient Longman, Calcutta.