## UNIVERSITY OF PUNE F.Y.B.A.

## PHISICAL GEOGRAPHY Gg-110 (G-1)

Revised Syllabus (from June, 2008)

## **Objectives:**

- 1. To introduce the students to the basic concepts in Physical Geography.
- 2. To acquaint the students with the utility and application of Physical Geography in different areas and environment.
- 3. To make the students aware of the need of protection and conservation of different landforms.

| Section I   |                                       |   |                  |  |
|-------------|---------------------------------------|---|------------------|--|
| Unit<br>No. | Unit                                  | Sub Unit  | No.of<br>periods |  |
| 1           | Introduction of Physical<br>Geography | <ul> <li>a. Meaning, Nature &amp; Scope.</li> <li>b. Importance of Physical Geography.</li> <li>c. Earth Measurements, Size and Shape, Radius, Circumference, Latitude and Parallels, Longitudes &amp; Meridians, Concept of Local Time, &amp; Standard Time, Time Zone &amp; International Date Line.</li> </ul> | 07               |  |
| 2           | Lithosphere                           | The earth – its Interior, Composition & Structure (Recent Views)  i. Wegner's Continental Drift Theory ii. Theory of Plate Tectonics  | 03<br>05         |  |
| 3           | Diastrophic Movements                 | <ul> <li>a. Meaning of Folding and Faulting</li> <li>b. Volcanism and Earthquake, Causes &amp; Distribution of<br/>Earthquakes in India</li> </ul>  | 04<br>05         |  |
| 4           | Rocks                                 | a. Classification of rocks on the basis of origin.     Properties of different rocks.   | 03               |  |

| 5   | Weathering & Soils        | a. Meaning & Types of Weathering,                               | 03 |
|-----|---------------------------|---|----|
|     |                           | b. Meaning of Soil, Soil Formation and Soil Profiles.           |    |
| 6.  | Agents of Erosion and     | a. Landforms of River Erosion and Deposition.                   | 04 |
|     | Deposition                | b. Landforms created by Sea-waves.                              | 03 |
|     |                           | c. Landforms created by Wind.                                   | 03 |
|     |                           | Section II  |    |
| 7.  | Atmosphere                | a. Meaning, Composition & Structure of Atmosphere               | 03 |
|     |                           | b. Nature and Importance of Ozone Layer                         | 02 |
| 8.  | Isolation                 | a. Heat budget of earth & Global warming                        | 02 |
|     |                           | b. Horizontal distribution of temperature                       | 02 |
|     |                           | c. Vertical distribution of temperature (Lapse rate &           | 02 |
|     |                           | Inversion of temperature)                                       |    |
| 9.  | Atmospheric Pressure &    | a. Formation of Pressure Belts and their relation with winds,   | 03 |
|     | Wind System               | Isobaric slopes, Coriolis forces, Ferrel's law.                 |    |
|     |                           | b. Monsoon Winds & Associated Weather                           | 02 |
| 10. | Atmospheric Moisture and  | a. Humidity and its types: absolute, specific and relative      | 02 |
|     | Precipitation             | humidity  | 04 |
|     | -                         | b. Forms of condensation & Types of precipitation               |    |
| 11. | Air Masses & Fronts       | a. Formation & types of air masses and fronts.                  | 04 |
|     |                           | b. Tropical cyclones : Causes and Distribution                  |    |
| 12. | Submarine relief of ocean | a. General idea of Submarine relief                             | 02 |
| 13. | Properties & Movement of  | a. Factors affecting salinity and Distribution of salinity      | 04 |
|     | ocean water               | b. Tides: Its types - Tsunami                                   | 02 |
| 14. | Applied Physical          | Concept & Methods of water conservation.                        | 06 |
|     | Geography                 | A Case Study of Johad (Rajasthan)/ Ralegan Siddhi/ Hiware Bazar |    |
|     |                           | (Ahmednagar, Maharashtra)                                       |    |

## **Reference Books:**

- 1 Physical Geography, A.N. Strahler
- 2 Morphology and Landscape, H. Robinson
- 3 General Climatology, H. J. Critchfield
- 4 The Face of Earth, Penguins 1980, Dury G. H.,
- 5 Elements of Geomorphology, Oxford University Press, Calculatta 2001, Kale V. & Gupta A.
- 6 Geomorphology, Prayag Pustakalay, Alahabad, 1988, Singh S
- 7 Atmosphere, Weather and Climate, Routledge 1998, Barry R.G. & Chorley R. J.
- 8 Climatology, MC Graw, Hill, New York 1974, Mather J. R.
- 9 Foundation of Climatology, Surject Publications, Delhi 1982 Stringer E.T.
- 10 An Introduction to Climate, International Students edition Mc Graw Hill, New York 1980.
- 11 General Oceanography, An introduction John Wiley & Sons, New York 1980, Graid S.
- 12 Prakrukik Bhuvigyan, Arvind Bhagwat, Shrikant Karlekar
- 13 Sugam Prakrutik Bhuvigyan, Prof. Suresh Date, Mrs. Date
- 14 Prakritik Bhugol, Part 1 & 2, W. R. Ahirrao, T. M. Varat, S. S. Alizad
- १५ हिरवे बाजारची यशोगाथा, सुरेशचंद्र वरघडे, प्रफुल्लता प्रकाशन, पुणे
- १६ जोहड : सौ. सुरेखा शहा, सुमेरु प्रकाशन, डोंबिवली
- १७ कायाकल्प : मा. अण्णा हजारे