

# S.N.D.T Women's University, Mumbai, -400020

## SYLLABUS Of Geography

With effect from June 2015

Scheme: Semester I

Physical Geography

Course: AC-I Code No: 170107

### Course Outcomes:

- 1) To introduce the students the basic concepts in physical geography.
- 2) To understand concept of movement of the earth.
- 3) To understand nature of theories in physical geography.
- 4) To make the students aware of application and utility

Sr.No.	TOPIC	Sub Topic	Periods	MARKS
1	Introduction of Physical geography	i) Meaning, nature and scope ii) Branches of geography	12	25
2	Imaginary lines and movement of the earth	i) Earth latitude & longitude, axis of the earth, parallels of latitudes, meridians of longitudes ii) Rotation and its effects-inequality of day and night ii) Seasons iii) Determination of Tropic of cancer, Tropic of Capricorn and polar circles	16	25
3	Origin of the earth	i) Earth origin and development- Kant, laplas, james & jeans, big bang theory ii) Interior of the earth	16	25
4	Crustal Movements	a) Concept of crustal movement i) Continental Drift theory ii) Plate tectonic theory b) Application of physical geography	16	25

## **References:**

1. Bharambe S. N. (2004): Physical Geography – Prashant Publication, Jalgaon.
2. Dasgupta & Kapoor (1980): Principles of Physical Geography
3. Hussain Majid (2004): Physical Geography, Rawat Publication, Jaipur
4. Robinson Harry (1995): Morphology and landscape M.C. Grow Hill
5. Singh Savindra (2009): Physical Geography. Prayag Pustak Bhawan, Allahbad
6. Strahler, A.H and Strahler A.N (2006): Modern Physical Geography, John Wiley and Sons (Asia) Pvt. Ltd.
7. Woreester P. (1990): A text book of Geomorphology, Longmon

## Scheme: Semester II

### Geomorphology

Course: AC-II Code No: 270207

#### Course Outcomes:

- 1) To introduce the students the basic concepts in Geomorphology.
- 2) To understand various geomorphic processes
- 3) To study the nature and technique of landform developments.

Sr.No.	Topic	Sub. Topic	Periods	Marks
1	Nature and scope of Geomorphology	i) Definition, nature and scope of geomorphology ii) Branches in Geomorphology iii) I,II,III order relief & landforms iv) application of geomorphology	12	25
2	Geomorphic Processes	i) Concept of endogenic & exogenic processes ii) Weathering and Mass movements iii) Volcanoes & Earthquakes	16	25
3	Concepts of Erosion, Transportation & Deposition	i) Concept of grade ii) Concept of erosion iii) concept of transportation iv) concept of deposition	16	25
4	Resultants landforms of various agents	i) Running water ii) Sea waves iii) Wind	16	25

## **References:**

1. Bharambe S. N. (2004) : Physical Geography. Prashant Publication. Jalgaon.
2. Bloom, A.L. (2002) : Geomorphology: A systematic analysis of late Cenozoic landforms, Prentice-Hall of India, New Delhi.
3. Chorley, R.J., Schumm, S.A. and Sugden, D.E. (1984) : Geomorphology, Methuen, London.
4. Goudie, A.S. (2004): (Edt). Encyclopedia of Geomorphology, Routledge, London. London.
5. Kale, V.S. and Gupta, A. (2001): Introduction to Geomorphology, Orient Longman, Calcutta.
6. Selby M.J. (1986): Earth's Changing Surface, Oxford University Press.
7. Singh Savindar (2002): Geomorphology, Prayag Pustak Bhawan, Allahabad
8. Sparks, B.W (1972): Geomorphology, Longman Group Ltd.
9. Thornbury, W.D. (1960) : Principles of Geomorphology, John Wiley and Sons, New York

**Scheme: Semester III**

**Introduction to Climate**

**Course: AC-III Code No: 375307**

**With effect from June 2016**

**Course Outcomes:**

1. To acquaint the students with basic knowledge of atmosphere, weather and climate.
2. To understand different characteristics and processes of atmosphere.
3. To know the fundamental concepts of insolation and heat budget.
4. To acquaint the students with weather forecasting.

<b>Unit No.</b>	<b>Topic</b>	<b>Sub-Topics</b>	<b>Periods</b>	<b>Marks</b>
<b>I</b>	Introduction to Atmosphere	A) Definitions of Atmosphere B) Composition of Atmosphere i)The Gases, ii) Water Vapour & iii) Particulates C) Structure of AtmosphereI) On the Basis of Chemical Composition:	<b>12</b>	<b>25</b>
<b>II</b>	Insolation and Heat Budget	A) Meaning and Definition of Insolation, Solar Constant and Albedo of the Earth B) Distribution of Insolation - Factors affecting the distribution of Insolation C) Heat Budget of the Earth and Atmosphere	<b>18</b>	<b>25</b>
<b>III</b>	Elements of Weather and Climate	A. Meaning and Definition of Weather and Climate B. Elements of Weather and Climate:  1) Temperature a) Meaning and Definition of Heat and Temperature. b) Distribution of Temperature  i)Factors affecting the distribution of temperature. ii)Horizontal Distribution of Temperature  2) Atmospheric Pressure a) Horizontal Distribution of Pressure b) Formation of Pressure Belts c) Shifting of Pressure Belts and their Effects  3) Winds a) Factors affecting Winds i) Pressure Gradient ii) Coriolis Force iii) Frictional Force  b) Classification of Winds i)Planetary Winds: Trade, Antitrade and Polar	<b>18</b>	<b>25</b>
<b>IV</b>	Weather Forecasting	I Meaning and Importance II Procedure of Weather Forecasting III Tools in Weather Forecasting IV Methods of Weather Forecasting: Synoptic, Statistical and Numerical Method	<b>12</b>	<b>25</b>

## Reference Books:

1. Aguado, E. and Burt, J.E. (2001): *Understanding Weather and Climate*, Printice Hall, Upper Saddal River, New Jersey.
2. Barry, R.G. & Chorly, R.J.(1995) : *Atmosphere, Weather and Climate*, Routledge, London and New York.
3. Critchfield, H. J.(2002) : *General Climatology*, Prentice Hall, New Delhi, India.
4. Das, P.K.(1968): *Monsoon*, National Book Trust, New Delhi.
5. Lal, D.S. (1986): *Climatology*, Chaitany Book Trust, New Delhi.
6. Majid Hussain(2002): *Climatology*.Rawat Publication, Jaipur
7. Millar A. et.al. (1983): *Elements of Meteorology*, Merrill, Columbus
8. Siddharth, K. (2001): *Atmosphere, Weather and Climate*, Kisaliya Publications Pvt. Ltd., New Delhi.
9. Singh Savindra (2005): *Climatology*, Prayag Pustak Bhawan, Allahabad.
10. Strahler, A.N. (1965): *Introduction to Physical Geography*, Willey, New York.
11. Stringer E.T.(1982) : *Foundation of Climatology*, Surjeet publications, Delhi.
12. Trewartha, G.T. (1980): *An Introduction to Weather and Climate*, McGraw Hill, New York.

**Scheme: Semester IV**

**Oceanography**

**Course: AC-IV Code No: 475407**

**With effect from June 2016**

**Course Outcomes:**

1. To study the basic part of oceanography.
2. To get the information about salinity and temperature of ocean water .
3. To study the relationship between the temperature and ocean currents.
4. To study the origin and effects of tsunami.

<b>Unit No.</b>	<b>Topic</b>	<b>Sub Topic</b>	<b>Periods</b>	<b>Marks</b>
I	Configuration and Submarine Relief of Ocean Floor	(a) Meaning and concept of Hydrosphere (b) Importance of the study of Oceanography (c) Surface configuration of ocean Floor (submarine relief) (d) submarine relief of Atlantic & Indian ocean	10	20
II	Properties of ocean water	(a) Temperature of ocean water i) Distribution of Temperature of ocean water (b) salinity of ocean water i) Definition and meaning ii) Isohalines (c) Factors affecting the distribution of Salinity of ocean water (d) Distribution of salinity- open ocean, Partially enclosed sea, inland sea & lakes	17	30
III	Ocean currents	(a) Definition, meaning and types of ocean Currents (b) causes of origin of the ocean currents (c) Ocean currents of Atlantic and Indian Ocean, El Nino and La Nina current (d) Effects of ocean currents	17	25
IV	Ocean coast and ocean Tides	(a) Definition and nature of ocean coast (b) Types of ocean coast i) submergence coast ii) emergence coast (c) Ocean Tides i) Definition and meaning of ocean tides ii) Types of tides i) Spring ii) Neap iii) Importance of Tides (d) Tsunami waves i) Definition and characteristics ii) Effects of Tsunami waves	16	25

## Reference Books

- 1) **Ahirao, Alizad and Dhapate(2002):** Climatology and oceanography
- 2) **Bharambe, Dhake and Dr. V.J.Patil(2002):** Physical Geography Part-II ( atmosphere and Hydrosphere
- 3) **Garison T. (1998):** Oceanography, Wardsworth Company, USA
- 4) **Gralds S. (1980):** General Oceanography- An introduction, Jon Waley and Sons, New York.
- 5) **Lake P.(1981):** Physical Geography, Cambridge, University Press
- 6) **Majid Husain (2001):** Fundamental of Physical Geography, Ravat publication Jaipur
- 7) **Negi B.S.(2005):** Climatology and oceanography, Kedarnath and Ramnath Publishing , Meerut.
- 8) **Padey, P.N. (2002):** Physical Geography, Nirali Prakashan, Pune
- 9) **Savindar sing (1992):** Physical Geography Prayag pustak bhavan, Allahabad.
- 10) **Sharma R.C. and M. Vatal (1970):** Oceanography for Geographers, Chaitanya Delhi.
- 11) **Strahler N. (1976):** Elements of physical Geography, Willey Nework
- 12) **Suryawanshi D.S., & Others ( 2011):** Geography (Lithosphere & Hydrosphere), Vrinda publication, Jalgaon
- 13) **Tikha R.N(1999) :** Physical Geography, Kedarnath and ramnath and co. Merrut
- 14) **Trewartha Robinson (1981):** Physical Elements of Geography, McGraw Hill Book Company, New Delhi
- 15) **Ummerkutty A.N.P. (1999):** Science of the Oceans, National Book Trust, New