

**SAURASHTRA  
UNIVERSITY**

**STRUCTURE OF THE COURSES**

**OF**

**SUBJECT : GEOGRAPHY**

**B.A. SEMESTER 3 and 4**

**(Revised Syllabus in Force from: June-2019)**

**SAURASHTRA UNIVERSITY**  
**ARTS FACULTY**  
 REVISED SYLLABUS  
 (Introduced from June, 2019)  
 B.A (GEOGRAPHY) SEMESTERS 3 and 4

Sr No	Level UG	Sem	Course Group	Course (Paper) Title	Credit	Internal Marks	External Marks	Practical /Viva Marks	Total Marks	Course (Paper) Unique Code
			Core / Elec-1 /Elec-2							
3	UG	3	Core	Elements of Climatology	4	30	70		100	1901300101030500
			Core	Physical Geography of India	3	30	70		100	1901300101030600
			Pract.	Elements of Cartography – 1	6	-	100	70+30	100	1901300601030100
			Elect-1	Elements of Climatology	4	30	70		100	1901300201030500
			Elect-1	Physical Geography of India	3	30	70		100	1901300201030600
			Elect-2	Elements of Climatology	4	30	70		100	1901300301030500
			Elect-2	Physical Geography of India	3	30	70		100	1901300301030600
4	UG	4	Core	Elements of Oceanography	4	30	70		100	1901300101040700
			Core	Socio – Economic Geography of India	3	30	70		100	1901300101040800
			Pract.	Elements of Cartography – 2	6	-	100	70+30	100	1901300601040200
			Elect-1	Elements of Oceanography	4	30	70		100	1901300201040800
			Elect-1	Socio – Economic Geography of India	3	30	70		100	1901300201040900
			Elect-2	Elements of Oceanography	4	30	70		100	1901300301040800
			Elect-2	Socio – Economic Geography of India	3	30	70		100	1901300301040900

**Note :**

1. Each paper and practical consist of 100 marks external and 30 marks internal. Semester – 3, 4, 5 and 6 consists of 2 Theory , 1 practical. There shall be a batch of 15 students for each Practical Course. There shall be Three Practical of six (6) hours duration, per week, per practical course.
2. Figures at the end of each topic of all the courses (Theory and Practical ) indicate tentative number of lecture to be delivered on respective topic of theory paper or exercise to be conducted in case of Practical.
3. Students can Carry Stencil Maps in the Examination.
4. Drawing maps and diagrams necessary in each papers.

**Subject:**

**Geography**

**Course (Paper) Name & No : Elements of Climatology Paper No - 5**

**Course (Paper) Unique Code : 1901300101030500**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	3	Core Elect-1/ Elect-2		Elements of Climatology	3	30	70		2.30 hrs

**Course Objectives:**

- The objective of this course is to make the students. The aim of the course is to provide an understanding of weather phenomena; dynamics of global climates and generation of climatic information and their application.

**Course Contents:**

Unit - I:

Weather and climate: Elements and Factors affecting of weather and climate, Difference between weather and climate. Climatology: Definition and significance of climatology, Origin and Composition and Structure of the atmosphere

Unit - II:

Insolation : Factors affecting the Insolation, distribution of Solar Insolation. Temperature: Factors controlling the temperature, Vertical & Horizontal distribution of temperature, temperature inversions.

Unit - III:

Atmospheric pressure: Factors affecting the pressure, Vertical and Horizontal distribution of pressure, Planetary and Local winds. Atmospheric disturbances: Tropical and Temperate cyclones.

Unit - IV:

Atmospheric moisture: Humidity, Evaporation and condensation, Types of precipitation.  
The hydrological cycle. Atmospheric pollution and Global warming.

Suggested Readings:

- 1) [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED] : [REDACTED], [REDACTED].
- 2) Barry, R. G. and Chorley P. J. : Atmosphere, Weather and Climate, Routledge, London and New York, 1998.
- 3) Critchfield, J. H. : General Climatology, Prentice Hall, India, New Delhi, 1993.
- 4) Das, P. K. : Monsoons National Book Trust, New Delhi, 1987.
- 5) Fein, J. S. and Stephens, P. N. : Monsoons, Wiley Inter science, 1987.
- 6) India Met. Deptt. : Climatologically Tables of Observatories in India, Govt. of India, 1968.
- 7) Lal, D. S. : Climatology, Chaitanya Publications, Allahabad, 1986.
- 8) Lydolph, P. E. : The Climate of the Earth, Rowman, 1985.
- 9) Menon, P. A. : Our Weather, N.B.T., New Delhi, 1989.
- 10) Peterson, S. : Introduction of Meteorology, Mc Graw Hill Book, London, 1969.
- 11) Robinson, P. J. and Henderson S. : Contemporary Climatology, Henlow, 1999.
- 12) Thompson, R. D. and Perry, A (ed.): Applied Climatology, Principles and Practice, Routledge, London, 1997.

**Subject:**

**Geography**

**Course (Paper) Name & No : Physical Geography of India-1 Paper No - 6**

**Course (Paper) Unique Code : 1901300101030600**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	3	Core Elect-1/ Elect-2		Physical Geography of India	3	30	70		2.30 hrs

**Course Objectives:**

- To understand India in terms of various physical division, their important characteristics.
- To understand diversity of cultures in the country.
- To prepare the students for understanding the India as a dynamic entity emerging from the physical elements.

**Course Contents:**

Unit - I:

Location, structure and main physiographic divisions of India, land of diversities unity within diversities.

Unit - II:

Drainage system of India and their functional, significance regional and seasonal variation of climate and climatic regions of India.

Unit - III:

Natural vegetation: types and distributions, their use and need for conservation and animal Life.

Unit - IV:

Mineral resources, Minerals – Iron ore , Manganese, Bauxite, Copper, Zinc, Limestone, Mica, Salt.

Energy Resources – Coal, Petroleum, Hydel, Wind.

Soil types of India: their distribution and characteristics, soils problems and their remedies.

Suggested Readings:

- 1) [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED] : [REDACTED], [REDACTED] [REDACTED] [REDACTED]. [REDACTED]
- 2) Singh R. L. India: A Region Geography National Geography Society of India Varansai - 1971.
- 3) Sharma T. C. : Economic and Commercial Geogrphay of India -Vika Publishing Hance Pvt. Ltd.
- 4) Wadia D. N. geology of India MC. Millan & Co. London – 1967.
- 5) डॉ. रामकुमारगुजरएन्दबी. सी. जाटभारतकाभूगोल – पंचशीलप्रकासनजयपुर.
- 6) Despande C.D. India – A Regional interpretation, Northern Book center new Delhi – 1992.
- 7) Dube R. N. : Economic & Geography of India.
- 8) Mamona G. B. : Advance Geography of India.

**Subject:**

**Geography**

**Course (Paper) Name & No : Elements of Cartography – 1 (Practical ) Paper No - 7**

**Course (Paper) Unique Code : 1901300601030100**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	3	Core Pract		Elements of Cartography – 1	6	-	100	70+30	5 hrs

**Course Objectives:**

- The objectives of this course are to train the students in the art of representing demographic and social economic data base of any area through simple statistical techniques and cartograms.
- The concept of weather map weather instruments and symbol necessary for accurate. Geographical weather forecasting and reading map.
- The course thus trains the student in preparing different types of maps.

**Course Contents:**

Unit - I:

The art and science of cartography – Techniques and preparation of maps, types of maps, principal of map design.

Unit - II:

Diagram representation of statistical data – (one dimensional diagram) simple line graph, simple bar diagram, combined line and bar graph, Climograph, Hythergraph, Wind rose.

Unit - III:

Weather Map – interpretation of Weather map, Symbols.

Weather instruments – introduction of following instruments – Thermograph (All types) Barometer, Anemometer, Rain gauge etc.



**Course (Paper) Unique Code : 1901300101040700**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	4	Core Elect-1/ Elect-2		Elements of Oceanography	3	30	70		2.30 hrs

**Course Objectives:**

- The objectives of the course are to introduce students to the many facets of Oceans, such as, evolution of the oceans, physical and chemical properties of sea water, atmospheric and oceanographic circulation, the fascinating world of marine life and the characteristic of marine environment and the impact of man on the marine environment.

**Course Contents:**

Unit - I:

Relevance of oceanography in Earth and atmospheric sciences: Definition, Nature and scope of oceanography surface, Configuration of the ocean floor - Continental shelf, Continental Slope, Deep Sea Plain or Abyssal Plain, Ocean deep or Trench Relief of Atlantic, Pacific and Indian Oceans.

Unit - II:

Composition of oceanic water, Distribution of temperature and salinity of Oceans and Seas.

Unit - III:

Circulation of Oceanic Waters: Waves and Tides, Currents: Currents of the Atlantic, Pacific and Indian Oceans.

Unit - IV:

Marine Deposits and Coral Reefs, Coastal Environment Oceans as Store House of Resources for the Future.

Suggested Readings:

- 1) [unclear]. [unclear]. [unclear]. [unclear]. [unclear] : [unclear], [unclear].
- 2) [unclear]. [unclear]. [unclear] : [unclear], [unclear].
- 3) Garrison T. Oceanography Wads worth com. USA
- 4) Grald General Oceanography : An Introduction John wiley & Sons New York
- 5) Thurman H. B. : Introductory Oceanography Charies webber E Merril Publication Co. 1984
- 6) Philip lake : Text book of Physical Geography Srishti Book Distribution. New Delhi
- 7) Matthew Fortaine: The Physical geography of the sea, the beknap press of Harvard University press.

**Subject:**

**Geography**

**Course (Paper) Name & No : Socio – Economic Geography of India-2Paper No -9**

**Course (Paper) Unique Code :1901300101040800**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	4	Core Elect-1/ Elect-2		Socio – Economic Geography of India	3	30	70		2.30 hrs

**Course Objectives:**

- These objectives of this course are to give an overview of the land, people and economy of the India.
- The course aims to provide an understanding of the existing reality of resource utilization and environmental depletion.
- To sensitize the students with development issues and policies.

**Course Contents:**

Unit - I:

Animal wealth of India, Dairy Farming, White revolution and Marine Resources.

Agriculture : Characteristics of cropping pattern, Agricultures regions of India, their problems and remedies, Major crops (Wheat, Cotton, Rice, Tea, Sugarcane, Grand nut) ,Green revolution.

Unit - II:

Major Multipurpose projects and their regional significance.

Industries - Location and Distribution of Major Industries – Iron and Steel, Aluminium, Cotton Textile, Sugar,PetroChemical and Allied, Cement.

Industrial Regions, Special Economic Zones

Unit - III:

Transportation: Road, Railways, Water routes, Air transportation, their distribution and development. Trade: National and international

Unit - IV:

Population structure, density and distribution of population in India and its problems.

Tourism Industry- Meaning and Types

Suggested Readings:

- 1) [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED]. [REDACTED] : [REDACTED], [REDACTED] [REDACTED] [REDACTED]. [REDACTED]
- 2) डॉ. रामकुमारगुजरएन्दबी. सी. जाटभारतकाभूगोल – पंचशीलप्रकासनजयपुर.
- 3) Singh R. L. India : A Region Geography National Geography Society of India Varanasi - 1971.
- 4) Sharma T. C. : Economic and Commercial Geography of India -Vika Publishing Hance Pvt. Ltd.
- 5) Wadia D. N. geology of India MC. Millan & Co. London – 1967.
- 6) Despande C.D. India – A Regional interpretation, Northern Book center new Delhi – 1992.
- 7) Dube R. N. : Economic & Geography of India.
- 8) Mamona G. B. : Advance Geography of India.

**Subject:**

**Geography**

**Course (Paper) Name & No : Elements of Cartography – 2 (Practical) Paper No - 10**

**Course (Paper) Unique Code : 1901300601040200**

**Course Exam Time Duration : 45 Lectures**

Name of Cour	Semester	Core/ Elective- 1/ Elective- 2/ Practical	Paper Code	Paper Title	Credit	Internal Marks	External Marks	Practical/ Viva/ Exam. Marks	External Exam. Time Duration
B. A.	4	Core Pract		Elements of Cartography – 2	6	-	100	70+30	5 hrs

**Course Objectives:**

- Geography is an amalgam of physical as well a social sciences one as such, it is necessity for the students to go through laboratory exercises, particularly the techniques of drowning cartograms showing physical, climatic and socio economic attributes of reign.
- The objective of shoving relief is to understand the topographical map and conventional signs.

**Course Contents:**

**Unit - I:**

Representation of relief features – Hachure’s, hill shading, layer tinting contours spot height and bench marks.Representation of relief by contours. (Uniform slope, Concave slope, Convex slope, Conical hill, V shaped valley, U shaped valley, Water fall, Saddle, terraced slope)

**Unit - II:**

Diagramic representation of statistical data .

- (I) Two dimensional statistical Diagrams – Rectangles, Squares, Circle, and Pie diagram.
- (II) Three dimensional statistical Diagrams – Cube, Proportional, Spheres.

**Unit - III:**

