

## COURSE OUTCOMES

**Department: GEOGRAPHY**

**Class: SYBA / Sem - 3**

**Subject and Paper: Geography Paper - 2**

**Name of the Paper / course: Fundamentals of Climatology**

**Name of the Faculty: Dr. Sumant Eknath Autade**

Module - I Introduction to Climatology		
	Course Outcomes	Teaching methods
1.1 Climatology: definition, nature and scope	1. Define climatology. 2. Illustrate nature and scope of climatology.	Chalk and talk and ppt presentation
1.2 Difference between climate and weather	3. Compare characteristics of climate and weather.	Chalk and talk discussion
1.3 Elements of climate	4. Discuss elements of climate.	Chalk and talk method,
1.4 Composition of the atmosphere	5. Explain composition of atmosphere.	Chalk and talk method, ppt presentation
1.5 Structure of the atmosphere	6. Understand layers of atmosphere. 7. Differentiate between characteristics of various layers of atmosphere.	Chalk and talk method, field work
1.6 Distribution of temperature	8. Discuss factors controlling distribution of temperature. 9. Elaborate vertical and horizontal distribution of temperature.	Chalk and talk method, group discussion
Module – II – Atmospheric pressure and winds – distribution and types		
2.1 Atmospheric pressure and its characteristics	1. Understand characteristics of atmospheric pressure. 2. Relate atmospheric pressure with other atmospheric phenomena.	Chalk and talk and ppt presentation
2.2 Low pressure and high pressure belts	3. Distinguish between low pressure and high pressure areas. 4. Illustrate conditions prevalent during high and low pressure formation.	Chalk and talk discussion
2.3 Tri-cellular model of atmospheric circulation	5. Evaluate tri-cellular model of atmospheric circulation.	Chalk and talk method,
2.4 Major pressure belt on the earth	6. Describe pressure belts on the earth surface.	Chalk and talk method,
2.5 Planetary and Monsoon winds	7. Describe formation and movement of planetary winds.	Chalk and talk method, field work
2.6 Local winds	8. Understand characteristics of local atmospheric circulations and their impact.	Chalk and talk method, group discussion
Module – III – Humidity, Condensation and precipitation		
3.1 Humidity meaning and their types	1. Define Humidity. 2. Illustrate different types of humidity.	Chalk and talk method,
3.2 Factors controlling humidity	3. Explain factors controlling humidity.	Chalk and talk method,

3.3 Condensation process: types of clouds	4. Understand condensation process: 5. Identify types of clouds	Chalk and talk method, field work
3.4 Precipitation and forms of precipitation	6. Explain the process of precipitation. 7. Discuss various forms of precipitation.	Chalk and talk method, group discussion
3.5 Types of rain	8. Describe types of rain.	Chalk and talk method, group discussion
Module – IV – Climate and atmospheric processes		
4.1 Cyclones: concepts and processes responsible for cyclones	1. Conceptualize Cyclone. 2. Elaborate processes responsible for cyclones	Chalk and talk method,
4.2 Tropical cyclones and temperate cyclones	3. Differentiate between tropical cyclones and temperate cyclones	Chalk and talk method,
4.3 Anticyclones and tornado	4. Define anticyclone and their characteristics. 5. Discuss various characteristics of tornado.	Chalk and talk method, field work
4.4 El Nino and Indian monsoon	6. Explain the concept of El Nino. 7. Understand the effects of El Nino Indian monsoon	Chalk and talk method, group discussion
4.5 Global warming and climate change	8. Illustrate concepts and causes of Global warming and climate change	Chalk and talk method, group discussion
Practical – interpretation of Indian daily weather report, construction of wind vane, climograph and hythergraph		
5.1 Construction of climograph, hither graph and wind vane	1. Construct climograph and describe it. 2. Construct hythergraph and describe it. 3. Construct wind vane and describe it.	Chalk and talk method, field work
5.2 Signs and symbols used in Indian daily weather report	4. Match signs and symbols to appropriate elements of Indian daily weather report. 5. Locate and understand signs and symbols in Indian Daily weather report.	Chalk and talk method, group discussion
5.3 Interpretation of daily weather report	6. Interpret and analyze Indian weather reports.	Chalk and talk method, group discussion

## COURSE OUTCOMES

**Department: GEOGRAPHY**

**Class: SYBA / Sem - 3**

**Subject and Paper: Geography Paper - 3**

**Name of the Paper / course: Physical Geography of India**

**Name of the Faculty: Dr. Sumant Eknath Autade**

Module - I: India – Introduction and physiography		
	Course Outcomes	Teaching methods
1.1 India – historical background, location, boundaries and importance of unique location of India in Asian Continent	1. Understand Historical and locational background of India 2. Remember State capitals of India 3. Elaborate importance of unique location of India in Asian Continent	Chalk and talk method, group discussion
1.2 Administrative divisions of India and physiographic characteristics of India	4. Remember administrative divisions of India 5. Understand physiographic characteristics of India	Chalk and talk method, group discussion
1.3 Himalayas, its importance and Northern Indian plains	6. Illustrate importance and physical characteristics of Himalayas. 7. Describe characteristics and importance of Northern Indian plains	Chalk and talk method, group discussion
1.4 Peninsular plateau region of India – characteristics, classification and importance	8. Understand characteristics, classification and importance of peninsular India	Chalk and talk method, group discussion
1.5 Coastal plains	9. Elaborate characteristics of coastal plains	Chalk and talk method, group discussion
1.6 Indian islands	10. Explain of Indian islands	Chalk and talk method, group discussion
Module – II India – Climate and drainage patterns		
2.1 General characteristics of Indian Climate and seasons	1. Understand General characteristics of Indian Climate. 2. Discuss characteristics and uniqueness of Indian climate and seasons.	Chalk and talk method, group discussion
2.2 Distribution of temperature and rainfall in India	3. Elaborate distribution of temperature and rainfall in India	Chalk and talk method, group discussion
2.3 Drainage in India: Himalayan rivers and peninsular river systems	4. Understand drainage systems in India: 5. Differentiate Himalayan rivers and peninsular river systems.	Chalk and talk method, group discussion
2.4 Himalayan drainage systems	6. Locate major Himalayan drainage systems in outline map of India. 7. Discuss characteristics of river systems in Himalayas	Chalk and talk method, group discussion
2.5 Drainage systems in peninsular India	8. Map major drainage systems in peninsular India 9. Discuss major drainage systems in peninsular India.	Chalk and talk method, field work
Module – III India – soils and forest resources		
3.1 Indian soils: types and their distribution	1. Illustrate importance of Indian soils:	Chalk and talk method, ppt

	2. Identify and locate major soil types and their distribution	presentation
3.2 Problems of soil degradation in India and methods of soil conservation	3. Discuss problems of soil degradation in India. 4. Elaborate methods of soil conservation.	Chalk and talk method, field work
3.3 Major types and distribution of Indian Forests	5. Identify and locate important types of forests.	Chalk and talk method, group discussion
3.4 Importance of Indian forests – direct and indirect forest functions	6. Discuss importance of Indian forests. 7. Distinguish between direct and indirect functions of forests	Group discussion and chalk and talk method
3.5 Problems of deforestation in India and methods of forest conservation	8. Discuss problems of deforestation. 9. Illustrate methods of forest conservation.	Group discussion and chalk and talk method
Module – IV – India – Minerals and energy resources		
4.1 Importance and classification of minerals in India	1. Discuss importance of minerals in India 2. Classify minerals and identify them.	Chalk and talk method, ppt presentation
4.2 Distribution of important metals in India	3. Discuss distribution of metals in India. 4. Locate major metal reserves in map of India	Chalk and talk method, field work
4.3 Distribution of important non-metals in India	5. Discuss distribution of non-metals in India. 6. Locate major non-metal reserves in map of India	Chalk and talk method, group discussion
4.4 Distribution of important energy resources in India	7. Discuss distribution of energy resources in India. 8. Locate major energy resources in map of India	Group discussion and chalk and talk method
4.5 Energy crisis in India and methods of energy conservation	9. Illustrate major causes of energy crisis. 10. Discuss methods of energy conservation.	Group discussion and chalk and talk method
Practical – Filling the outline map of India, scale – verbal, numerical (RF) and linear		
5.1 Filling the outline map of India with significant (point, line and polygon) features related to physiography of India	1. Locate important elements in the outline map of India related to physical geography. 2. Apply basic knowledge of cartography in map filling of India.	Chalk and talk method, ppt presentation
5.2 Map scale: meaning and their types	3. Understand the concept of map scale. 4. Remember types of map scale.	Chalk and talk method, field work
5.3 Conversion of verbal scale into representative fractions and vice versa	5. Convert verbal scale into representative fractions. 6. Convert representative fractions into verbal scale.	Chalk and talk method, group discussion
5.4 Conversion of verbal and numerical scale (RF) to linear scale	7. Understand methods of drawing linear scale. 8. Convert verbal and numerical (RF) scale to linear scale.	Group discussion and chalk and talk method