Name of the Programme	:	B.A (Geography)
Class		F.Y.B.A
Semester	:	Ι
Name of Vertical Group	••	Main Subject
Course Code	:	GEO-101-T
Course Title		Introduction to Physical Geography
Type of course	:	Theory
Total Credits	:	02
Workload	:	(15 hours/credit) 2 credits x 15 hours = 30 hours in semester

## **Objectives of the Course:**

- 1. To acquaint students with basic principles of Physical Geography
- 2. To introduce the processes and patterns in the atmosphere, hydrosphere and lithosphere.
- 3. To develop scientific insights into dynamics of the earth system.

## **Topics and Learning Points**

Topic No	Topic Name	Sub Topic	No. of Hours
1.	Introduction to Physical Geography	<ul> <li>i. Introduction, definition and branchesof Geography</li> <li>ii. Definition and Branches of Physical Geography</li> <li>iii. Nature, Scope and importance of Physical Geography</li> </ul>	08
2	Lithosphere	<ul><li>i. Interior of the Earth - Structure and Composition</li><li>ii. Wegener's Continental Drift Theory</li></ul>	06
3.	Atmosphere	<ul> <li>i. Concept of weather and climate.</li> <li>ii. Composition and structure of the atmosphere</li> <li>iii. Factors affecting horizontal distribution of the temperature</li> </ul>	08
4.	Hydrosphere	<ul> <li>i. General structure of ocean floor</li> <li>ii. Movements of ocean water</li> <li>a. Tides- meaning, causes and types</li> </ul>	08

## **Course Outcome:**

## By the end of this course, student will be able to:

- CO1 : Understand fundamental concepts, theories and approaches of Physical Geography
- **CO 2** : Recognize functions of complex interactive earth systems.
- **CO3** : Demonstrate scientific explanation of physical processes of the atmosphere, hydrosphere and lithosphere.
- **CO 4** : Describe diverse human activities in changing natural environment.

## **References:**

- 1. Dayal P., (1996), Text Book of Geomorphology, Shukla Book Depot, Patna.
- 2. Kale V.S. and Gupta A., (2015), Introduction of Geomorphology, University Press, Kolkata.
- 3. Lal, D. S., (1998), Climatology, Chaitanya Publishing House, Allahabad.
- 4. Kale V.S. and Gupta A., (2001), Elements of Geomorphology, Oxford Univ. Press.
- 5. Monkhouse F.J., (1951), Principles of Physical Geography, McGraw Hill Pub New York.
- 6. Singh Savindra., (2000), Physical Geography, Prayag Pustak Bhavan, Allahabad.
- 7. Singh Savindra., (2000), Oceanography, Prayag Pustak Bhavan, Allahabad.
- 8. Husain, M., (2001), Fundamentals of Physical Geography, Rawat Publication, Jaipur.
- 9. Siddhartha, K., (2001), The Earth's Dynamic Surface, Kisalaya Publications Pvt. Ltd, New Delhi.
- 10. Lutgens, F.K. and Tarbuck, E.J., (2007), The Atmosphere, Pearson Prentice Hall, New Jersey.
- 11. Bergwan, Edward E., (1995), Human Geography: Culture, Connections and Landscape, Prentice-Hall, New Jersey.
- 12. Fellman, J.L., (1997), Human Geography-Landscapes of Human Activities. Brown and Benchman Pub., U.S.A.
- 13. Johnston, R.J., (1994), Dictionary of Human Geography, Blackwell, Oxford.
- 14. Chandna, R.C., (2000), Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
- 15.वाणी, बी.के.आणि पाटील एन.एम., (२०२०),प्राकृतिक व मानवी भूगोल, अथर्व प्रकाशन, जळगाव.

\*\*\*\*\*\*

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	:	Ι
Name of Vertical Group	:	Main Subject
Course Code	••	GEO-102-P
Course Title	:	Practicals in Physical Geography
Type of course	:	Practical
Total Credits	:	02
Workload	:	2 credits x 30 hours = 60 hours in semester

## **Objectives of the Course:**

- 1. To acquaint students with methods of relief representation
- 2. To develop skills of students in interpreting contour maps, landforms and other relief features

Topic No	Topic Name	Sub Topic	No. of Hours
01	Qualitative Methods of Relief Representation	Methods of Relief Representation Qualitative Methods a. Hachures b. Hill shading c. Color shading or tinting	20
02	Quantitative Methods of Relief Representation	Methods of Relief Representation Quantitative Methods a. Spot Height b. Bench Mark c. Triangulation Method d. Contours e. Form lines	20
03	Representation of slope and landforms by contours	<ul> <li>Representation of slope by contours <ul> <li>a. Gentle and steep slope</li> <li>b. Even and uneven slope</li> <li>c. Concave and convex slope</li> </ul> </li> <li>Representation of landforms by contours <ul> <li>a. Conical hill</li> <li>b. Cliff</li> <li>c. V shaped valley</li> </ul> </li> </ul>	20

Topic No	Topic Name	Sub Topic	No. of Hours
		<ul><li>d. Ridge</li><li>e. Plateau</li><li>f. Pass</li></ul>	

## By the end of this course, student will be able to:

- CO1 : Identify different methods of relief representation
- **CO 2** : Apply both qualitative and quantitative methods in representing and interpreting geographical features

- 1. Ahirrao, D. Y. And Karanjkhele, E.K., (2002), PratyakshikBhugol, Sudarshan Publication, Nashik.
- 2. Chandana, R. C., (2015), Geography of Population, Kalyani Publisher, New Delhi.
- 3. Hans Raj, (1978), Fundamentals of Demography: (population Studies with Special Reference to India), Surjeet Publication, Delhi.
- 4. Jadhav, S., Chaudhari, A. and Chaudhari, A., (2020), PratyakshikBhugol, Prashant Publication, Jalgaon.
- 5. *Nagtode* P. M., and *Lanjewar* H.D., (2009), Nakashashtra, *Pimplapure Publication*, *Nagpur*
- 6. *Sarkar Ashis, (2015), Practical Geography*: A Systematic Approach, Orient Blackswan Pvt Ltd, Hydrabad
- 7. Singh, G., (2005), Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
- 8. Singh, R.L., (2005), Elements of Practical Geography. Kalyani Publishers, New Delhi.
- 9. Singh, J. and Dhillon, S., (1994), Agricultural Geography. McGraw Hill Education India Pvt Ltd, New Delhi.

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	:	Ι
Name of Vertical Group	••	OE
Course Code	:	<b>OE-101-GEO</b>
Course Title		Geographyof Tourism
Type of course	••	Theory
Total Credits	:	02
Workload	:	(15 hours/credit) 2 Credits x 15 hours = 30 hours in semester

## **Objectives of the Course:**

- 1. To understand the diverse nature and broad scope of Tourism Geography.
- 2. To provide students with a broad understanding of recent and emerging types of tourism.
- 3. To gain insights into specialized forms of tourism and understand their characteristics and sustainability considerations associated with them.
- 4. To explore the socio-cultural determinants of tourism.
- 5. To classify and analyse diverse tourism trends, enabling the students the dynamic nature of the tourism industry.

Topic No	Topic Name	Sub Topic	No. of Hours
1	Introduction to Tourism Geography	<ul><li>i. Definition, Nature and Scope of Tourism Geography</li><li>ii. Concept of Tourist and Tourism</li><li>iii. Importance of Tourism in Geography</li></ul>	10
2	Determinants of Tourism Development	<ul> <li>i. Physical</li> <li>a. Relief</li> <li>b. Climate</li> <li>c. Forest</li> <li>d. Water</li> <li>ii. Socio-Cultural</li> <li>a. Religious</li> <li>b. Historical</li> </ul>	10

Topic No	Topic Name	Sub Topic	No. of Hours
		c. Cultural iii. Political a. Policies iv. Other a. Accessibility b. Safety of Tourists	
3	Classification and recent types of Tourism	<ul> <li>i. Classification of Tourism based on <ul> <li>a. Nationality</li> <li>b. Travel Period</li> <li>c. Purpose of Tourism</li> </ul> </li> <li>ii. Recent types of Tourism <ul> <li>a. Agro Tourism</li> <li>b. Ecotourism</li> <li>c. Wildlife Tourism</li> <li>d. Health Tourism</li> <li>e. Sports Tourism</li> </ul> </li> </ul>	10

#### By the end of this course, student will be able to:

- **CO1** : Understand of the definition, nature, and scope of tourism.
- **CO2** : Recognize and articulate the economic, social, and cultural importance of tourism.
- **CO3** : Categorize tourism based on nationality, understanding the distinctions between domestic and international tourism.
- **CO 4** : Analyze the impact of physical determinants such as relief, climate, forests, and water bodies on tourism development and experiences.
- **CO 5** : Identify and evaluate the influence of religious, historical, and cultural factors on tourist attractions and destination choices.

- 1. Cooper, C. and Hall, M., (2008). Tourism and Leisure: Issues and Challenges. Channel View Publications, Bristol.
- 2. Goeldner, C. R. and Ritchie, J. R. B., (2017). Tourism: Principles, Practices, Philosophies. John Wiley & Sons, Hoboken.
- 3. Singh, V. and Joshi, S., (2012). Tourism Planning and Development: Concepts and Issues. Sterling Publishers, New Delhi.
- 4. Page, S. and Connell, J., (2009). Tourism: A Modern Synthesis. Cengage Learning, Hampshire.
- 5. Seth P.N., (1985), Successful Tourism Management, Sterling Publisher Ltd., New Delhi.
- 6. Mhatre, S., (2015), Tourism Geography: An Integrated Approach. Himalaya Publishing House, Mumbai.

- 7. Kulkarni, A., and Shah, N. (2018), Tourism in Nashik: A Comprehensive Guide. Notion Press, Chennai.
- 8. Deshmukh, P., (2019), Tourism in Ahmednagar: Trends and Challenges. Udyog Sahayadri, Ahmednagar.
- 9. Patil, N. and Chavan, S., (2017), Tourism in Pune: Exploring the Cultural Capital. Sahyadri Books, Pune.
- 10. Sharma, S. and Gupta, M., (2013), Tourism Development in India: A Case Study Approach. PHI Learning Pvt. Ltd., New Delhi.

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A
Semester	:	I
Name of Vertical Group	:	V 1
Course Code	:	SEC-101-GEO
Course Title	:	Introduction to Water Analysis
Type of course	:	Theory
Total Credits	:	02
Workload	:	Total Workload: -2 credits x 15 hours = 30 hours in semester

## **Objectives of the Course:**

- 1. To understand water quality parameters.
- 2. To learn various types and sources of water
- 3. To learn various quality indices useful for drinking and irrigation water analysis.

Topic No	Topic Name	Sub Topic	No. of Hours
1	Parameters of	i. Parameters of water quality:	
	water quality	a. Physical,	
		b. Chemical,	10
		c. Biological,	
		ii. Significance of water analysis	
2	Types of water sources and pollutions	<ul> <li>i. Types of water sources, occurrence, and importance</li> <li>ii. Water pollution: source, types, and management</li> </ul>	06
3	Standards of	i. BIS (Bureau of Indian Standards)	04

Topic No	Topic Name	Sub Topic	No. of Hours
	water quality	ii. WHO (World Health Organization)	110u15
4	Characteristics	i. Indices for drinking water	
	of Water	a. WQI	
	quality indices	ii. Indices for irrigation water	
		a. Sodium Adsorption Ratio (SAR) (Richards 1954),	10
		b. Residual Sodium Carbonate (RSC) (Eaton 1950),	
		c. Sodium Percentage (SP) (Wilcox 1955),	
		d. Kelly's ratio (Kelly 1963)	

#### By the end of this course, student will be able to:

- **CO1** : Comprehensive understanding of various water quality parameters useful for assessment of water resources.
- **CO 2** : Understand water quality standards of BIS and WHO.
- **CO3** : Understand the characteristics of water quality indices for drinking water and irrigation.

- 1. Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, Water Environment Federation.
- 2. Water Quality Assessments: A Guide to the Use of Biota, Sediments and Water in Environmental Monitoring Deborah V. Chapman (Editor).
- 3. Water Quality: Guidelines, Standards and Health Lorna Fewtrell and Jamie Bartram.
- 4. Environmental Engineering: Water, Wastewater, Soil and Groundwater Treatment and Remediation Nelson L. Nemerow and Franklin J. Agardy.
- 5. BIS 10500:2012 Drinking Water Specification
- 6. BIS 2296:1982 Specifications for Packaged Natural Mineral Water
- BIS 3025:1983 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water
- BIS 3589:2001 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water (Revision of IS 3025)
- 9. BIS 1622:2008 Drinking Water Specification
- BIS 3025:1964 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	••	II
Name of Vertical Group	:	Main Subject
Course Code	:	GEO-151-T
Course Title	:	Introduction to Human Geography
Type of course		Theory
Total Credits		02
Workload	••	(15 hours/credit) 2 credits x 15 hours = 30 hours in semester

#### **Objectives of the Course:**

- 1. To create awareness amongst students regarding the fundamental concepts of Human Geography, including its meaning, nature and scope.
- 2. To understand the branches of Human geography i.e. Population Geography, Settlement Geography and Agriculture Geography.
- 3. To explore different types and patterns of settlement.
- 4. To understand the types of agriculture with problems.

Topic No.	Topic Name	Sub Topics	No. of Hours
1.	Introduction	i. Meaning and definition of Human Geography	08
	to Human	ii. Nature and scope of Human Geography	
	Geography	iii. Branches and Importance of Human Geography	
2.	Population	i. Factors affecting on distribution of population	12
	and	ii. Composition of Indian Population: Gender and	
	Settlement	Literacy	
		iii. Theory of Demographic Transition	

Topic No.	Topic Name	Sub Topics	No. of Hours
		iv. Types and patterns of rural settlement	
3.	Agriculture	<ul><li>i. Types of agriculture (Intensive, Subsistence)</li><li>ii. Factors affecting Indian agriculture</li><li>iii. Problems of Indian agriculture</li></ul>	12

## By the end of this course, student will be able to:

- **CO1** : Define and explain the meaning, nature and scope of Human Geography.
- CO 2 : Discuss the different branches of Human Geography
- CO 3 : Appreciate the growth, distribution and composition of population in India
- **CO 4** : Analyse the types and patterns of rural settlements

## **References:**

- 1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
- 2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver and Boyd, London.
- 3. Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur
- 4. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
- Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
- 6. Jyotiram More and Musmade Arjun(2015) Regional Geography of India Diamond Publication Pune.
- 7. Kaushik, S.D. (2010) Manavi Bhugol, Rastogi Publication, Meerut.
- 8. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
- 9. Musmade Arjun, Sonawane Amit and Jyotiram More, Population & Settlement Geography, (2015), Diamond Publication Pune.
- 10. Sudeepta Adhikari (2016) Orient Blackswan PVT, New Delhi.

\*\*\*\*\*

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	:	II
Name of Vertical Group	:	Main Subject
Course Code	:	GEO-152-P
Course Title	:	Practicals in Human Geography
Type of course	:	Practical
Total Credits	:	02
Workload	:	Total Workload: -2 credits x 30 hours = 60 hours in semester

## **Objectives of the Course:**

- 1. To understand and interpret various population indices.
- 2. To analyse settlement patterns using various measures of nucleation and dispersion.
- 3. To develop their skills in utilizing techniques in Agricultural Geography.

Topic	Topic Name	Sub Topic	No. of
No			Hours

Topic No	Topic Name	Sub Topic	No. of Hours
1	Population	Population Indices i. Age Sex Pyramid ii. Dependency Ratio iii. Infant Mortality Ratio iv. Population Growth Rate	16
2	Settlement	Measures of Nucleation and Dispersion of Settlement i. Rank Size Rule ii. Nearest Neighbour analysis	20
3	Agriculture	<ul><li>i. Crop Combination method: Weaver's method</li><li>ii. Crop diversification method: Bhatia's method</li></ul>	24

#### By the end of this course, student will be able to:

- **CO1** : Identify different methods of representation of population indices.
- **CO 2** : Identify patterns of nucleation and dispersion in human settlements
- CO 3 : Calculate and interpret crop combination methods to analyze spatial patterns and trends in agricultural land use

- 1. Carter Harold (1977): The study of Urban Geography
- 2. Hans Raj (1978): Fundamentals of Demography
- 3. Hudson F.S. (1976): Geography of Settlements
- 4. Michael E. and E. Hurse: Transportation Geography
- 5. Pollard A. H. and Farhat Yusu: Demographic Techniques
- 6. Singh, R. L. Reading in Rural Settlement Geography
- 7. Yeats, M. H. (1974). An introduction to Quantitative Analysis in Human Geography
- 8. Singh, J. and Dhillon (1984): Agricultural Geography.
- 9. Liendsor, J. M. (1997): Techniques in Human Geography, Routledge.

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	:	Π
Name of Vertical Group	:	V4 VSC
Course Code	:	OE-151-GEO
Course Title	:	Practicals in Tourism Geography
Type of course	:	Practical
Total Credits	:	02
Workload	:	2 Credits x 30 hours = 60 hours in semester

## **Objectives of the Course:**

- 1. To provide students with practical knowledge and skills related to tour planning and management.
- 2. To familiarize students with the information about the necessary documentation for tour planning
- 3. To train the students with the essential online booking process
- 4. To recognize the importance of tour planning in the tourism industry.

Topic No	Topic Name	Sub Topic	No. of Hours
1	Introduction of Tour planning	<ul> <li>i. Meaning of Tour planning</li> <li>ii. Elements of Tour planning</li> <li>iii. Classification of Tour planning: individual, family, group and mass level</li> <li>iv. Importance of tour planning.</li> </ul>	16
2	Techniques of Tour Planning	<ul> <li>i. Preparation of Tour Planning: Leaflet of tour planning, Passenger documentation, Insurance calculation, Currency exchange, Time exchange and calculation, Distance measurement.</li> <li>ii. Tourist Guide</li> <li>iii. Computer application for tour planning.</li> <li>iv. Procedure of passport &amp; visa application.</li> <li>v. Booking and cancellation system: Transportation (Air, Rail, Road) and hospitality (accommodation)</li> </ul>	24
3	Planning and visit to tourist place	Preparation of one short or long international/ national/ local tour plan.	20

## By the end of this course, student will be able to:

- **CO1** : Identify and describe the essential elements of tour planning.
- **CO 2** : Prepare tour planning materials, including documentation and booking and cancellation systems for transport and accommodation.
- **CO3** : Develop skills required to plan and manage tours effectively.

#### **References:**

- 1. Bhatt H (2007) Tourism Planning and Development, Commonwealth Publishers, New Delhi
- 2. Bhatia AK (2002), Tourism Development: Principles and Practices, Revised edition Sterling Publishers Private Limited, New Delhi.
- 3. Chand, M (2002) Travel Agency Management, Anmol Publication
- 4. Ghosh Bishwanth (2000), Tourism & Travel Management, Second Revised Edition Vikas Publishing House Pvt Ltd, New Delhi.
- 5. Seth, P.N. (1998). An Introduction to Travel and Tourism, Sterling Publishers Pvt. Ltd., New Delhi.
- 6. Muluk, Doke, Musmade, More (2021), Geography of Tourism II, Nirali Publication, Pune
- 7. Sinha, P (1998). Tourism Planning. Anmol Publication Pvt. Ltd., New Delhi.
- 8. Pacharne, Patil, Suryavanshi, Chaudhar (2014) Tourism Geography, Atharv Publication, Pune.

\*\*\*\*\*\*

Name of the Programme	:	B.A. (Geography)
Class	:	F.Y.B.A.
Semester	:	II
Name of Vertical Group	:	SEC
Course Code	:	SEC-151-GEO
Course Title	:	Practicals in water analysis
Type of course	:	Practical
Total Credits	:	02
Workload	:	Total Workload: -2 credits x 30 hours = 60 hours in semester

## **Objectives of the Course:**

- 1. To identify and explain key water quality parameters.
- 2. To learn various quality indices useful for drinking and irrigation water analysis.
- 3. To train the students for the interpretation of water quality data with the comparison of regulatory standards.

Topic No	Topic Name	Sub Topic	No. of Hours
1	Introduction to water quality	<ul> <li>i. Definition</li> <li>ii. Water quality parameters: Physical, Chemical</li> <li>iii. Standards of water quality assessment: BIS (Bureau of Indian Standards) and WHO (World Health Organization)</li> <li>iv. Classification of water qualities</li> </ul>	16
2	Water quality analysis for drinking water	<ul><li>iii. Calculation of WQI using weighted parameters</li><li>iv. Gibbs Analysis</li></ul>	20
3	Water quality analysis for irrigation	<ul> <li>i. Calculate, and compare WHO standards and interpret two examples of each following indices</li> <li>a. Sodium Adsorption Ratio (SAR) (Richards 1954),</li> <li>b. Residual Sodium Carbonate (RSC) (Eaton 1950),</li> <li>c. Sodium Percentage (SP) (Wilcox 1955),</li> <li>d. Kelly's ratio (Kelly 1963),</li> </ul>	24

#### By the end of this course, student will be able to:

- **CO1** : Comprehensive understanding of various quality indices useful for assessment of water resources.
- **CO 2** : Select and calculate appropriate water quality indices based on specificobjectives and available data.
- **CO3** : Interpret the overall water qualities with a comparison of BIS and WHO standards.

- 11. Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, Water Environment Federation.
- 12. Water Quality Assessments: A Guide to the Use of Biota, Sediments and Water in Environmental Monitoring Deborah V. Chapman (Editor).
- 13. Water Quality: Guidelines, Standards and Health Lorna Fewtrell and Jamie Bartram.
- 14. Environmental Engineering: Water, Wastewater, Soil and Groundwater Treatment and Remediation Nelson L. Nemerow and Franklin J. Agardy.
- 15. BIS 10500:2012 Drinking Water Specification
- 16. BIS 2296:1982 Specifications for Packaged Natural Mineral Water
- 17. BIS 3025:1983 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water
- BIS 3589:2001 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water (Revision of IS 3025)
- 19. BIS 1622:2008 Drinking Water Specification
- 20. BIS 3025:1964 Methods of Sampling and Test (Physical and Chemical) for Water and Waste Water