LORETO COLLEGE
SEMESTER FIVE GEOGRAPHY HONOURS
TIME PLAN 2023

Name of the teacher: Dr. Sushma Sahai
Initials: SWS

Teaching Objective:

- To help students understand GIS Data Structures
- Analyse the principles of preparing attribute tables
- Assess and evaluate the principles of buffer and overlay analysis
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

Semester Five Geography Honours Topic-wise Time Plan
COURSE: 2.23 GEO-A-CC-5 -12 -TH – Remote Sensing, GIS and GNSS
Unit II: Geographical Information Systems and Global Navigation Satellite System

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
7.	5	1. GIS data structures: types: spatial and non-spatial, raster and vector	• Lecture method • Stimulus Response Method • Discussion/ Interactive method • Visual aids	• Understand the various data structures • Differentiate between Raster and Vector	• Tutorials • Home assignments
8.	6	2.Principles of preparing attribute tables and data manipulation and overlay analysis	• Lecture method • Stimulus Response Method • Discussion/ Interactive method • Visual aids	• Comprehend the technique of constructing attribute tables • Understand the significance of manipulation and overlay analysis	• Google Forms • Quiz
9.	4	3. Principles and significance of buffer preparation	• Lecture method	• Differentiate between buffer and overlay	• Poster Designing

			• Stimulus Response Method • Stimulus Response Method • Discussion/ Interactive method • Visual aids	• Understand the principles of buffer preparation	• Home assignments
10.	5	4.Principles and significance of overlay analysis	• Lecture method • Stimulus Response Method • Discussion/ Interactive method • Visual aids	• Understand the mechanism of overlay • Comprehend and analyse the difference between buffer and overlay	• Crossword • Google Forms • Model Question Bank - Viva

LORETO COLLEGE
SEMESTER FIVE GEOGRAPHY HONOURS
TIME PLAN 2023 -2024

Name of the teacher: Dr. Sushma Sahai
Initials: SWS

Teaching Objective:

- To impart comprehensive knowledge of rural and urban settlements
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

Semester Five Geography Honours Topic-wise Time Plan
COURSE: 3.10 GEO-A-DSE-B-6-05-TH – CULTURAL AND SETTLEMENT GEOGRAPHY LAB

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
Unit II: Settlement Geography	3	7.Rural Settlement: Definition, nature & characteristics	• Lecture method • Discussion/ Interactive method	• Understand the concept of rural settlements	• Tutorials
2	5	8.Morphology of rural settlements: site & situation, layout – internal & external	• Lecture method • Discussion method	• Comprehend the meaning of morphology	• Tutorials • Home assignments
3	7	9. Rural house types, Social segregation in rural areas: Census categories of rural settlements	• Lecture method • Discussion/ Interactive method	• Understand various rural house types and Census categories	• Paper presentation
4	3	10. Urban Settlements: Census definition (Temporal) & categories in India	• Lecture method • Discussion method	• Understand Census categories	• Tutorials • Home assignments
5	7	11. Urban morphology: Models of Burgess, Hoyt, Harris & Ullman	• Discussion/ Interactive method	• Comprehend the meaning of morphology	• Google Forms • Quiz
6	5	12. City-region & conurbation. Functional classification of cities: Schemes of Harris, Nelson & McKenzie	• Discussion/ Interactive method	• Understand the functional classification of cities	• Tutorials

LORETO COLLEGE
SEMESTER FIVE GEOGRAPHY HONOURS
TIME PLAN 2023 - 2024

Name of the teacher: Dr. Sushma Sahai
Initials: SWS

Teaching Objective:

- To impart comprehensive knowledge of the cartographic techniques to enable language mapping
- To enable students to imbibe the skill to represent housing distribution data
- To prepare students for higher education
- To provide guidance beyond prescribed syllabus

Semester Five Geography Honours Topic-wise Time Plan
COURSE: 3.10 GEO-A-DSE-B-6-05-P – CULTURAL AND SETTLEMENT GEOGRAPHY LAB (PRACTICAL)

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1	10	1. Mapping language distribution in India	• Lecture method • Discussion/ Interactive method	• Developed skills to plot the cartogram • Acquired the knowledge of selecting the appropriate cartogram based on the data provided	• Tutorials - Solve past question papers • Viva Voce
2	20	2. CD block – wise housing distribution in any district of West Bengal using proportional squares	• Lecture method • Discussion/ Interactive method	• Developed skills to plot the cartogram • Acquired the knowledge of selecting the appropriate scale based on the data provided	• Tutorials- Solve past question papers • Home assignments • Viva Voce

LORETO COLLEGE
SEMESTER FIVE GEOGRAPHY HONOURS
TIME PLAN 2023-2024

Name of the teacher: Mrs S. Sethwala
Initials: S.S

Teaching Objective:

- to help students to design data collection plans, analyze data, interpret and draw conclusions
- to train students and help develop skills in research methodologies and to help students to identify the process of designing a research study
- to train students to identify a research problem
- to help students identify processes responsible for climate change and the adaptations to this change
- to train students with the logistics involved in Field Trips and its importance in the discipline.

Semester V Honours Topic-wise Time Plan

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1. CC 11 TH 2.21 Research Methodology and Fieldwork	20	UNIT I: Research Methodology 1. techniques of writing a report 2. Plagiarism UNIT II: Fieldwork 1.Field Techniques and tools 2. Positioning and collection of samples	lecture method project method problem solving method	• Able to familiarise with the research process • Able to design questionnaires and interview methods for field trips. • Able to recognise common types of sampling design	• class tests • Objective • worksheets • home assignments • exams • research project assigned group wise
1. CC 11 TH 2.22 Research Methodology and Fieldwork	20	1. Preparation of Field Report on the basis of data collected from field and Secondary sources	Lecture method Problem solving method	• Able to establish relationship between physical and cultural attributes • To be able to suggest measures and solutions to the problems in the field area	• Class tests • Viva voce
3.DSE A 6 TH 3.3 Climate Change: Vulnerability and adaptation	20	1. Origin, scope of climate science 2. Climate change and GTS 3. Factors of climate change 4. vulnerability 5.Impact of climate change 6. role of urban local bodies	lecture method class discussion method	• To be able to identify the causes, effects, and solutions for climate change	• class tests • MCQ /Objective • Worksheets • home assignments • case study • exams
4 DSE A 6 PR 3.4 Climate Change: Vulnerability and adaptation	15	1.Analysis of trend of temperature 2. comparative analysis of seasonable variability of rainfall	lecture method Practical exercises	• To be able to draw temperature time series graph • Calculatethe seasonal variability	• class tests • home assignments • exams

LORETO COLLEGE
SEMESTER FIVE GEOGRAPHY HONOURS
TIME PLAN 2023-2024

Name of the teacher: Kaustuva Banerjee
Initials: KB

Teaching Objective:
- Comprehend the use of Remote Sensing and GIS in Geography
- Assess the importance of Sensor resolutions and their applications with reference to IRS and Landsat missions
- Evaluate the importance of technology in interpretation of geographic phenomena
- Differentiate between CartoDEM and SRTM.

Semester V Honours Topic-wise Time Plan

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
GEO-A-CC-5-12-TH – Remote Sensing, GIS and GNSS	30	1. Principles of Remote Sensing (RS): Types of RS satellites and sensors 2. Sensor resolutions and their applications with reference to IRS and Landsat missions 3. Image referencing schemes and acquisition procedure of free geospatial data from NRSC / Bhuvan and USGS 4. Preparation of False Colour Composites from IRS LISS-3 and Landsat TM / OLI data. 5. Principles of image interpretation. Preparation of inventories of landuse land cover(LULC) features from satellite images 6. Acquisition and utilisation of free Digital Elevation Model data: CartoDEM, SRTM and ALOS	Demonstration Method Lecture Method Stimulus Response Method	1. Comprehend the importance of sensor resolution 2. Analyze the different Image referencing schemes 3. Evaluate the principles of image interpretation. 4. Understand the principles of image interpretation	Continuous Internal Assessment Summative Assessment

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
GEO-A-CC-5-12-P – Remote Sensing, GIS and GNSS Lab	50	1. Image georeferencing and enhancement. Preparation of reflectance libraries of LULC features across different image bands of IRS L3 or Landsat OLI data 2. Supervised image classification, class editing, and post-classification analysis 3. Digitisation of features and administrative boundaries. Data attachment, overlay, and preparation of annotated thematic maps	Lecture Method Demonstration Method Laboratory Method	1. Differentiate between IRS L3 and Landsat OLI data imageries 2. Use QGIS to prepare LULC maps.	Continuous Internal Assessment Summative Assessment

LORETO COLLEGE
SEMESTER FIVE HONOURS
TIME PLAN 2023 -2024

Name of the teacher: Sharmila Ray Kumam
Initials: SRK

Teaching Objective:

- To develop a deep understanding of the basic and fundamental principles of research starting from the preliminary stage of conducting research in the field of geography. It will provide a step-by step guide to each phase of research in order to assist students to ultimately conduct their individual research work in a more meaningful manner.

- To generate a deeper meaning in the cultural diversity that exists in the world today and stimulate a respect and appreciation for this multicultural world today in the student so that they are more sensitive to differences and diversity.

Topics	Hours Allotted	Topics (as per curriculum)	Teaching Method	Learning Outcomes	Assessment
GEO-A-CC-5-11-TH Unit1 Research Methodology 2	2	Literature Review	Lecture /Handout	Understand the need for literature review	Discussion, Oral Q&A
3	4	Research Problem	Lecture /Handout	Gain expertise on formulating the research question(s)	Discussions, Q&A
3	4	Research Objectives	Lecture & Presentation/Handout	Help in the identification of the goals and purpose of the research	Discussion Subjective Q&A
3	4	Research Hypothesis	Lecture & Presentation/Handout	Understanding the need for formulating the hypotheses	Discussions, Q&A
2/6	6	Research Design / Research Method	Lecture & Presentation /Handout	Know the need for different design & methods	Individual student presentation
4	2	Research Materials	Lecture participatory discussion	Have the knowledge of available research material to be used	Q&A
GEO-A-DSE-B-6-05-TH Cultural Geography Unit1 1	5	Definition scope content of cultural Geography	Lecture/Handout	Develop an understanding of meaning, scope, and content	Q&A Exchange of concrete examples

2	5	Cultural Geography & other allied disciplines	Lecture /Handout	Understanding inter- disciplinary nature of Cultural geography	Subjective question and tutorial
3/6	6	Cultural hearth, Realm, Cultural Regions of India	Lecture/Hand out	Understanding the concepts and their manifestations over space	Discussions Maps PPT
3	6	Diffusion, & of major world religions and languages	Lecture/Hand out	Comprehending the core principles of diffusion and their manifestations	Q&AStudent Presentations
4	5	Cultural Segregation and Diversity: culture, technology& development	Lecture	Impact of development, technology, culture on diversity& segregation	Q&A Student Presentation
5	5	Races & Racial Groups of the World	Lecture /Handout /PPT	Imbibing the existence of wide racial diversity and economic diversity globally	Q&A
Cultural Settlement Geography Lab 3	4	Identification of rural settlement types from toposheet	Practical reading and identification in the toposheet	Correlating the map representation to the real field identification	Map reading and identification of the rural settlement types.

LORETO COLLEGE
TIME PLAN 2023-2024

Name of the teacher: DEBASREE SINHA
Initials: D.S

Teaching Objective:
- Facilitate the application of geographical knowledge to real world scenarios
- Develop an interest in pursuing geographical research, making use of RS GIS techniques
- Enable the understanding of human-environment interactions
- Promote the appreciation of changing climate as the foremost environmental crisis of the Anthropocene

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
1. HONS – Paper GEO-A-CC-5-11-TH – (Theory) Research Methodology and Fieldwork, Unit I: Research Methodology Unit II: Fieldwork	25	1. Research in Geography: Meaning, types and significance 8. Field techniques and tools: Observation (participant, non-participant), questionnaires (open, closed, structured, non-structured). Interview 11. Post-field tabulation, processing and analysis of quantitative and qualitative data	1. Lecture 2. Power point presentation	Students will be able to: 1. Identify existing research types in Geography 2. Comprehend the significance of fieldwork in geographical research 3. Choose relevant field techniques and tools at the time of research. 4. Analyse and properly represent data collected during field	1. Written class test
2. HONS – GEO-A-CC-5-12-TH – (Theory) Remote Sensing, GIS and GNSS, Unit III: Global Navigation Satellite System (GNSS)	10	11. Principles of GNSS positioning and waypoint collection 12. Principles of transferring of GNSS waypoints to GIS. Area and length calculations from GNSS data	1. Lecture 2. Power point presentation	Students will be able to: 1. Have knowledge of current GNSS in operation. 2. Transfer GNSS waypoints to GIS and perform area and length calculations	1. Written class test

3. HONS – GEO-A-CC-5-12-P – (Practical) Remote Sensing, GIS and GNSS	15	4. Waypoint collection from GNSS receivers and exporting to GIS database	1. Demonstration of use of GPS and relevant software	Students will be able to: 1. Use GPS in retrieving location of ground points and transform them onto software. 2. Use collected data for mapping and other purposes	1. Handling of GPS and doing relevant tasks on the software
4. HONS – Paper GEO-A-DSE-A-5-02-TH – (Theory) Climate Change: Vulnerability and Adaptations	30	4. Greenhouse gases and global warming. 5. Electromagnetic spectrum, atmospheric window, heat balance of the earth. 6. Global climatic assessment: IPCC reports. 9. Global initiatives to climate change mitigation: Kyoto Protocol, carbon trading, clean development mechanism, COP, climate fund. 10. Climate change vulnerability assessment and adaptive strategies with particular reference to South Asia. 11. National Action Plan on climate change.	1. Lecture 2. Power point presentation	Students will be able to: 1. Perceive the importance of the climate system in maintaining life on the planet. 2. Identify processes and activities affecting the Earth's climate. 3. Be sensitive to the impacts of a changing climate. 4. Develop a keen interest in the initiatives of climate change mitigation. 5. Identify vulnerable groups and policies in place for such communities.	1. Class written test. 2. Student presentations.

| 4. HONS – Paper GEO-A-DSE-A-5-02-P – (Practical) Climate Change: Vulnerability and Adaptations | | 3. Annual rainfall variability of about three decades for any two representative climatic regions of India 4. Preparation of an inventory of extreme climatic events and mitigation measure of any climatic region / country of South Asia for a period of one decade on the basis of secondary information | 1. Demonstration of calculations. 2. Instructions on inventory preparation. | Students will be able to: 1. Identify rainfall variability across climatic regions of India. 2. Prepare inventory of extreme climatic events and their mitigation measures. | 1. Written test. |