

Lecture Plan							
Name of the college: Government College of Arts, Science and Commerce Sanquelim Goa							
Name of Faculty: Dr Arati Panshekar				Subject: Geography (GEP-PROJECT)- SPATIAL DYNAMICS OF SETTLEMENT DISTRIBUTION AND TRANSPORT NETWORK EFFICIENCY: A STUDY ON ROUTE DENSITY, ACCESSIBILITY AND STRUCTURAL ORGANIZATION IN SATTARI TALUKA			
Paper code: GEP		Program: TYBA			Division: -		
Academic year: 2024 - 2025		Semester: VI			Total Lectures: 30		
Course Objectives: 1. To examine the spatial distribution and dynamics of settlements in Sattari Taluka with a focus on understanding the factors influencing settlement patterns and their relationship with natural and socio-economic environments. 2. To evaluate the efficiency of the transport network in Sattari Taluka by analyzing route density, accessibility, and structural organization, and to assess its role in enhancing regional connectivity and development.							
Expected Course Outcome: 1. Students will be able to analyze the spatial distribution and dynamics of settlements in Sattari Taluka, identifying key factors influencing settlement patterns and their implications for regional planning and development. 2. Students will develop skills to assess the efficiency of transport networks by evaluating route density, accessibility, and structural organization, enabling them to propose strategies for improving connectivity and optimizing transport infrastructure.							
Student Learning Outcome: 1. Students will demonstrate the ability to interpret spatial patterns of settlements using geographic tools and techniques, applying critical thinking to evaluate the relationship between settlements and their environmental and socio-economic contexts. 2. Students will effectively analyze transport network efficiency by utilizing spatial data and metrics such as route density and accessibility, showcasing their ability to suggest practical improvements for regional connectivity and development planning.							
Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books

December	09-12-2024	14-12-2024	02		Classwork	Classroom Teaching	<p>□ Banerjee, S., & Duflo, E. (2011). <i>Poor economics: A radical rethinking of the way to fight global poverty</i>. Public Affairs.</p> <p>□ Bhatta, B. (2010). <i>Analysis of urban growth and sprawl from remote sensing data</i>. Springer Science & Business Media.</p> <p>□ Demetriou, D., See, L., & Stillwell, J. (2013). A spatially explicit method for measuring land fragmentation. <i>Computers, Environment and Urban Systems</i>, 39, 93–102. https://doi.org/10.1016/j.compenvurbsys.2012.02.005</p> <p>□ Kumar, R., & Jat, M. K. (2014). Assessment of urban sprawl using remote sensing and GIS techniques. <i>International Journal of Remote Sensing Applications</i>, 4(2), 75–83.</p> <p>□ Lang, T. (2012). Shrinking cities: Causes and effects of urban population declines. <i>Urban Geography</i>, 33(2), 223–248. https://doi.org/10.2747/0272-3638.33.2.223</p> <p>□ Li, X., & Yeh, A. G. O. (2004). Analyzing spatial restructuring of land use patterns in a fast-growing region using remote sensing and GIS. <i>Landscape and Urban Planning</i>, 69(4), 335–354. https://doi.org/10.1016/j.landurbplan.2003.10.033</p> <p>□ Rodrigue, J. P., Comtois, C., & Slack, B. (2020). <i>The geography of transport systems</i> (5th ed.). Routledge.</p> <p>□ Saaty, T. L., & Vargas, L. G. (2013). <i>Decision making with the analytic network process: Economic, political, social and technological applications with benefits, opportunities, costs and risks</i>. Springer Science & Business Media.</p> <p>□ Taaffe, E. J., Morrill, R. L., & Gould, P. R. (1963). Transport expansion in underdeveloped countries: A comparative analysis. <i>Geographical Review</i>, 53(4), 503–529.</p> <p>□ Wegener, M., & Fürst, F. (2004). Land-use transport interaction: State of the art. <i>IRPUD</i></p>
	16-12-2024	21-12-2024	02	Literature review			
January	02-01-2025	04-01-2025	02	Chapter 2- literature review			
	06-01-2025	11-01-2025	02	Chapter 3 Geographical Profile of the study area			
	13-01-2025	18-01-2025	02	Chapter 3 Geographical Profile of the study area			
	20-01-2025	25-01-2025	02	Analysis of settlements pattern in Sattari taluka			
	27-01-2025	01-02-2025	02	Analysis of settlement patterns in Sattari Taluka			
Febraury	03-02-2025	08-02-2025	02	Analysis of Transport			
	10-02-2025	15-02-2025	02	Analysis of Transport			
	17-02-2025	22-02-2025	02	Chapter writing			
	24-02-2025	01-03-2025		Chapter writing			
			02				

							<i>Working Paper.</i> Institute of Spatial Planning, University of Dortmund.
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*** Assessment Rubrics**

Component	Max Marks
Viva	100