

<b>GIS 503: RS AND GIS IN URBAN PLANNING AND DISASTER MANAGEMENT</b>		
<b>GIS in Urban Planning</b>		
Unit 1	<b>Concepts:</b> Urban, Urbanism, Urbanisation, Regional Concept and Types of Planning process, presentation and preparation Origin and Growth of Urbanisation in the World <b>Urban Problems: Pollution, Slum, Housing, Social wellbeing.</b>	6 hrs
Unit 2	<b>Application of GIS, GPS and RS: in Urban and Regional Planning</b> Research Methods in Urban and Regional Studies. Applications of RS and GIS in Socio-economic Information Analysis, Agricultural Information System –Land Holdings–Irrigation, Land Use, Land Reforms.	6 hrs
Unit 3	<b>RS and GIS Applications:</b> in Agriculture and Rural Development, Concept of Rural Development–Globalization and its impact on Agriculture and Rural Development. Types of agriculture, Livestock.	6 hrs
Unit 4	<b>Application of RS and GIS:</b> in rural problem solving situation–Village Information System and planning. Planning in India–Development policies (Five Year Plans) Geo-informatics for Precision Farming-Importance and relevance to Indian Agriculture.	6 hrs
<b>GIS in Disaster Management</b>		
Unit 5	<b>Disaster Management:</b> Concepts of disaster; Types of disaster Natural and manmade: <b>Cyclone, flood, landslide, land subsidence, fire and earthquake.</b> Issues and concern for various causes of disasters. Principles of Disaster Management, Natural Disasters, Hazards, Risks and Vulnerabilities.	6 hrs
Unit 6	<b>Assessment of Disaster:</b> Vulnerability of allocation and vulnerable groups. Preparedness and Mitigation measures for various Disasters. <b>Preparation of Disaster Management Plans.</b>	6 hrs
Unit 7	<b>Issues in Environmental Health, Water &amp; Sanitation, Earthquake Mitigation, Floods, Fire, Landslides and other natural calamities.</b> Post Disaster Relief & Logistics Management.	6 hrs
Unit 8	<b>Information systems &amp; decision making tools.</b> Role of <b>Remote Sensing in Science &amp; Technology.</b> Rehabilitation Programmes. Voluntary Agencies & Community Participation at various stages of disaster management. Role of military and paramilitary forces during disaster. Emergency Support: Functions and their coordination mechanism. Resource and Material Management. Management of Relief Camp.	6 hrs

## References

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2. Lo, F and K. salih, Growth pole strategy and regional development policy, oxford; pergaman press, 1999.
3. Harry W. Richardson, Regional and urban economics, 1979.
4. R.P. Misra and K.V. Sundaram, Multilevel planning and integrated rural development in India, Heritage publishers, New Delhi, 1980.
5. Sartaz Aziz, road to rural to rural development in china.
6. Lewis Keeble, principles and practice of town and country planning, the estimates gazette Ltd., London, 1964.
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11. Gordon E. Cherry, Urban Planning problems. Leonard Hill, London, 1974.
12. P.E. James and C.F. Jones, American geography: Inventory and Prospect, Rawat, Jaipur.
13. Hyderabad 2020, Master plan for HMA, 2003.
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15. Ecology, Environment & Pollution - A. Balasubramanian (1995) M/s. Indira Publishers, Mysore.
16. Atmosphere, Weather and Climate: An introduction to Meteorology-Narora-S. B. Saunders Co., Philadelphia
17. Physical Geology - A. N. Strahler.
18. Meteorology - William L. Donn (1975) - McGraw-Hill Book Co., New York.
19. An introduction to Dynamic Meteorology - J. R. Holton (1992) - III Ed, Academic Press.
20. R.W. Tank: Focus on Environmental Geology (p. 256)