GIS 503: RS AND GIS IN URBAN PLANNING AND DISASTER MANAGEMENT		
GIS in Urban Planning		
Unit 1	Concepts : Urban, Urbanism, Urbanisation, Regional Concept and Types of Planning process, presentation and preparation Origin and Growth of Urbanisation in the World Urban Problems: Pollution, Slum, Housing, Social wellbeing.	6 hrs
Unit 2	Application of GIS, GPS and RS: in Urban and Regional Planning 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	RS and GIS Applications: 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	Application of RS and GIS : 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
GIS in Disaster Management		
Unit 5	Disaster Management : Concepts of disaster; Types of disaster Natural and manmade: Cyclone, flood, landslide, land subsidence, fire and earthquake. Issues and concern for various causes of disasters. Principles of Disaster Management, Natural Disasters, Hazards, Risks and Vulnerabilities.	6 hrs
Unit 6	Assessment of Disaster: Vulnerability of allocation and vulnerable groups. Preparedness and Mitigation measures for various Disasters. Preparation of Disaster Management Plans.	6 hrs
Unit 7	Issues in Environmental Health, Water & Sanitation, Earthquake Mitigation, Floods, Fire, Landslides and other natural calamities. Post Disaster Relief & Logistics Management.	6 hrs
Unit 8	Information systems & decision making tools. Role of Remote Sensing in Science & Technology. 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

- 1. R.J. Chorley and P. Hayget, Socio-economic models in geography, 1967.
- 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.
- 7. Gideon Sjoberg, The origin and evolution of cities, scientific American, 1965.
- 8. John N. Jackson, the urban future, George Allen and Unwin Ltd., London, 1972.
- 9. Charles Korea, Report on the national commission on urbanization, 1980.
- 10. Peter hall, Urban and Regional planning, Penguin books, Middlesex, 1976.
- 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.
- 14. Leonard Riesman, The urban process, free press, London, 1964.
- 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)