SOFT COURSE: GYS 504: Disaster Studies

Course Learning Outcomes:

- CO1. Identify major natural disaster.
- CO2. Analyze the causes and consequence of disaster.
- CO3. Execute the different preventing methods.
- CO4. Connect real world with methods.

Units	Course Content	Teaching Hours
1	Environment hazards & disasters: Meaning & approaches, Causes and consequences of disaster: Physical, economic and cultural, National and International organizations into disaster management. Types of environmental hazards and disaster: Natural disaster- Earthquake, tsunamis, landslides, volcanic eruption, cyclones, tornados, floods, droughts, heat waves and cold waves. Man induced hazards-Soil erosion, release of toxic chemicals, nuclear explosion, population explosion and resultant environmental disasters.	13
2	Emerging approaches to Disaster management: (1) Pre-disaster stage (Preparedness)-hazard zonation maps-predictability and forecasting warning, land use zoning, Information, Education & Communication (IEC) Disaster resistance house construction, Population reduction in vulnerable area and awareness. (2) Emergency Stage- Rescue training for search and operation at national and regional level, ground management plan preparation, immediate relief, Assessment surveys. (3) Post disaster stage rehabilitation – Political administrative aspects, social aspect, economic aspect, cultural aspect and environmental aspects	14
3	Natural Disaster mitigation: Relief measure, role of GIS in Relief measures, role of GNSS in search and rescue, role of Remote sensing in prediction of hazards and disasters, measures of adjustment of natural hazards	14

References:

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- 2. Savinder Singh, (1997): Environmental Geography, Prayag Pustak Bhawan.
- 3. Kates, B.I & White, (1978): G.F the Environment as Hazards, oxford, New York.
- 4. R.B. Singh (Ed), (2000): Disaster Management, Rawat Publication, New Delhi.
- 5. H.K. Gupta (Ed), (2003): Disaster Management, Universities Press, India.
- 6. R.B. Singh,(1994):Space Technology for Disaster Mitigation in India (INCED), University of Tokyo.
- 7. Dr. Satender, (2003): Disaster Management t in Hills, Concept Publishing Co., New Delhi.
- 8. A.S. Arya Action Plan for Earthquake, Disaster Mitigation.
- 9. V.K. Sharma (Ed) (1994): Disaster Management IIPA Publication New Delhi.
- 10. R.K. Bhandani An overview on Natural & Man-made Disaster & their Reduction, CSIR, New Delhi
- 11. M.C. Gupta, (2001): Manuals on Natural Disaster management in India, National Centre for Disaster Management, IIPA, New Delhi.