

THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME
 (Goa University Choice Based Credit System)
GEOGRAPHY GENERIC ELECTIVE GPGE-III w.e.f. 2018-19
FUNDAMENTALS OF DISASTER MITIGATION
S. Y. B. A. / B. SC. / B. COM.
SEMESTER III

COURSE CREDITS: 04

Total Lectures: 60 Lectures of 1 Hour Each.

COURSE OBJECTIVES: The main objective of this paper is to orient the students to know the fundamentals or basic concepts of disaster management and mitigation in a geographical perspective. Studying of disaster management and mitigation as a multi disciplinary subject will also be met. It is to develop awareness amongst the students as the catalyst in the Society.

LEARNING OUTCOMES: At the end of this Generic course, the students will be able to understand the link between the physical unavoidable hazard systems in the world. The information will enable the students to become alert citizen and express their understanding before others. Finally the students will acquire basic skills of taking judicious decisions for saving their family and society at the time of distress.

UNIT NO.	COURSE CONTENT	MARKS WEIGHTAGE	TEACHING PERIODS
I	1. Introduction to Disaster Management and Disaster Mitigation Fundamentals: Natural Calamities and Accidents and Abuses. Natural Hazards, Risks, Vulnerability and Disasters: Definition and Concepts, Nature, and contents of Disaster Mitigation in Geog. Source of Disaster data (Govt. agencies and NGOs).	25	15
II	2. Disasters in India: (a) Causes, Impact, Distribution and Mapping: Flood, Landslide, Drought with elaborate examples from the world and Indian States.	25	15
III	3. Disasters in India: (b) Causes, Impact, Distribution and Mapping: Earthquake, Tsunami and Cyclone.	25	15
IV	4. Human induced disasters: Causes, Impact, Distribution and Mapping. 5. Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management; Do's and Don'ts During Disasters	25	15
TOTAL		100	60

Weightage of marks: ISA 20 + SEE 80

Total= 100. Credit: 4

Instructions

1. Thrust may kindly be given to draw national and regional examples by the teachers.
2. Field orientation should be attempted by the teachers and the Institutions for verifying ground truths.
3. The data should be updated by referring to journals, newspapers, websites and other relevant materials.
4. Questions should be set with due weightages to all the units as specified above or by Goa University.

Reading List

1. Government of India. (1997) Vulnerability Atlas of India. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
5. Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
6. Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
7. Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
8. Singh Jagbir (2007) "Disaster Management Future Challenges and Opportunities", 2007. Publisher- I.K International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).

THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME

(Goa University Choice Based Credit System)
GEOGRAPHY GENERIC ELECTIVE GPGE-IV w.e.f. 2018-19
APPLICATION OF DISASTER RISK REDUCTION AND MITIGATION
(WITH A MINI PROJECT)
S. Y. B. A. / B. SC. / B. COM.
SEMESTER IV

COURSE CREDITS: 04

Total Lectures: 60 Lectures of 1 Hour Each.

COURSE OBJECTIVES: The main objective of this paper is to orient the students to apply the fundamental knowledge of disaster risk reduction, management and mitigation in a geographical perspective. It is to develop preparedness amongst the students as the catalyst in the Society.

LEARNING OUTCOMES: At the end of this Generic course, the students will be able to be alert during the unforeseen hazards. The information will enable the students to become moral citizen and use their understanding before others. Finally the students will acquire confidence of taking judicious decisions for saving their family and society at the time of disasters.

UNIT NO.	COURSE CONTENT	MARKS WEIGHTAGE	TEACHING PERIODS
I	Fundamentals of Application of Disaster Risk Reduction and Mitigation: Understanding the Threat, Mental Preparedness, Logistics, Coordination, Warning Signals, Communication Disaster Mitigation in Geog.	30	15
II	Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC.	20	15
III	Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia. National Action Plan on Climate Change; Local Institutions (Urban Local Bodies, Panchayats)	30	15
IV	A Mini Project Report based on any one field based case studies among following disasters and preparedness plan of the Government or respective college or locality: 1. Flood, 2. Drought, 3. Cyclone and Hailstorms 4. Earthquake, 5. Landslides, 6. Human Induced Disasters: Fire Hazards, Chemical, Industrial accidents.	20	15
TOTAL		100	60

Weightage of marks: ISA 20 + SEE 80

Total= 100. Credit: 4

Instructions

1. Thrust may kindly be given to draw national and regional examples by the teachers.
2. Field orientation should be attempted by the teachers and the Institutions for verifying ground truths.
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3. Mødh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
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Further Readings