

**DEPARTMENT OF GEOGRAPHY**  
**ADVANCED POST GRADUATE DIPLOMA IN DISASTER**  
**MANAGEMENT**

**1 YEAR COURSE**

Estd 2010

*The whole syllabus will be covered in two semesters. With 8 papers (100 marks each and one dissertation (Project work) worth 200 marks.*

**1<sup>st</sup> semester : 4 papers of 100 marks each = 400 marks**

Code: APGDDM 701

Code: APGDDM 702

Code: APGDDM 703

Code: APGDDM 704

1 Training program 100 marks = 100 marks

Code: APGDDM 705

Photo exhibition and presentation covering past and recent disasters (with both hard and soft copy record) with special reference to North East India.

**Total = 500 marks**

**2<sup>nd</sup> semester : 3 theory papers of 100 marks each = 400 marks**

Code: APGDDM 706

Code: APGDDM 707

Code: APGDDM 708

Project work of 200 marks [Dissertation and viva voce (125 + 75)]

Code : APGDDM 709

**Total = 500 marks**

For exam: Two alternative questions will be asked from each unit in each paper.

There will be grading system for the students (personnels) on the basis of marks secured from aggregate percentage as follows:

Total marks in %	Grade
$\geq 75.0$	O
65.0 to 74.99	A
55.0 to 64.99	B
45.0 to 54.99	C
$< 45.00$	D



**PAPER –I : UNDERSTANDING NATURAL DISASTERS  
AND THEIR MANAGEMENT**

**100**

**CODE : (APGDDM -701)**

Unit	-I	Understanding natural disasters and their management flood and case studies of different types of flood with scale.
	-II	Drought, cyclone and pest infection and their case studies.
	-III	Earthquakes, Tsunamis and land slides and their case studies.
	-IV	Avalanches, Volcanic eruptions, heat and cold waves and their case studies.
	-V	Global warming, sea level rise, ozone depletion, causes and impact.

**PAPER –II : UNDERSTANDING MAN-MADE DISASTERS**

**100**

**CODE : (APGDDM -702)**

Unit	-I	Nuclear disasters and chemical disasters case studies of chernoby and three mile island, Pennsylvania. Causes, crisis management group (CMG) and Dos and Don'ts.
	-II	Chemical and Biological Disasters: Causes and Impacts; Institutional Aspects; Preparedness and response; Lessons learnt- The Bhopal Gas tragedy and the study of plague at Surat.
	-III	Fire hazards: Building fires; Coal fires; Forest fires; Oil fires, Case studies and Lessons learnt for all the above separately with Dos and Don'ts.
	-IV	Pollution: Air, water, Waste water from industries; Different causes and Impacts; Quality measurement and management.
	-V	Accidents: Rail; road; Air; Sea; Causes and Impacts; Predictability, risk reduction measures and lessons learnt from case studies. Terrorism and Communal riots.



**PAPER –III : RISK ASSESSMENT AND VULNERABILITY ANALYSIS**

100

**CODE : (APGDDM -703)**

Unit	-I	Hazard, Risk and Vulnerability: Concept and elements; Risk reductions; Risk reductions; Risk analysis techniques.
	-II	Participatory; Vulnerability analysis; Perception of Vulnerability and Vulnerability as a socially constructed phenomenon, Local adaptation strategies.
	-III	Vulnerability identification: Social factors, Economic factors; Gender, Poverty, State of Public health, Children, Weaker Section and Disabled people.
	-IV	Vulnerability of Shanty settlements: the spurious urbanization; Risk in cities; issues in Urban Planning; Risk reduction in India.
	-V	Strategies for Survival; the role of development Planning; Resource mobilization; Strategic development for vulnerability reduction.

**PAPER –IV : DISASTER PREPAREDNESS**

100

**CODE : (APGDDM -704)**

Unit	-I	Disaster management: Prevention, preparedness and Mitigation; Concept and nature of Disaster preparedness; Disaster Preparedness plan.
	-II	Disaster preparedness for people with special needs/ vulnerable groups; DP with relevance to housing, infrastructure and livestock.
	-III	DP: Role and responsibilities of central, State and local admn.; Role and responsibilities of armed forces; Police, Para-military forces, NSS and Scouts. International Agencies NGOs, Media Community.
	-IV	Role of IT in DP with special reference to GIS. Remote Sensing, Aerial Photography Land-use zoning IRDM.
	-V	Disaster Mitigation: Strategies; Emerging trends: Sustainability, Social cost-benefit analysis, EIA Epidemiological Surveillance.

**PAPER –V:**

**CODE : (APGDDM -705)**

Field works covering all aspects of the First Four papers; Collection of Appropriate photographs and exhibition by every candidate which will culminate in a presentation. Documentation and Audio visual presentation.

**60+40=100**



**SECOND SEMESTER: 3 THEORY PAPER OF 100 MARKS EACH AND A PROJECT WORK OF 200 (125 + 75)**

**PAPER –VI : DISASTER RESPONSE**

500

100

**CODE : (APGDDM -706)**

Unit	-I	Essential components of response: response plan: Communication and activation; Logistic Management; Damage Assessment.
	-II	Stakeholders in DR; Centre, State, District & Local; Armed Forces, Police; Role of Multiple stakeholders in DR.
	-III	Community response: IKS, Fire, Flood any other.
	-IV	Managing Human Behaviour and Response: Psychological Response: Trauma and Stress Management; Rumour and Panic Management.
	-V	Relief Measures: Minimum Standard of Relief; Management of Relief; Funding Relief; Recovery.

**PAPER –VII : DISASTER MEDICINE**

100

**CODE : (APGDDM -707)**

Unit	--I	Understanding D/ Medicine; Epidemiology Prevention of risk; Medical preparedness plan.
	-II	Logistic management; Remote area planning; Training in Health management; Site management.
	-III	Clinical casualty management; Community health management; Health response; IT in health response.
	-IV	Psychological rehabilitation; Practical manual; Case studies in medical and health management – NB Flood 2000, Gujrat Earth quake -2001 Tsunami, 2004, Mumbai Flood -2005.



**PAPER –VIII : REHABILITATION, RECONSTRUCTION, RECOVERY:**

**100**

**CODE : (APGDDM -708)**

Unit	-I	Rehabilitation as means of Development, Damage Assessment, Role of various agencies.
	-II	Development of physical and economic infrastructure, Creation of long-term job opportunities and livelihood options, funding arrangements.
	-III	Nature of damage to houses and infrastructure, resistant house. Construction, Role of building authorities.
	-IV	Education and Awareness, the philosophy of coping with disaster, Dealing of victims' psychology, Role of information dissemination.
	-V	Participative rehabilitation process: Some case studies- Malpa landslide, Latur Earthquake, Bhuj Earth-quake. Livelihood restoration after super cyclone of Orissa. Monitoring Long term recovery and counter disaster planning.

**PAPER –IX:**

**CODE : (APGDDM -709)**

**200**

Each student will select one project work covering one natural or manmade disaster and has to submit the project report before the final 2<sup>nd</sup> semester examination.

**\* Project work** **125**

**\* Viva-voce** **75**