

**SYLLABI OF DIPLOMA COURSE IN DISASTER MANAGEMENT
SEMESTER- I**

Introduction of Disaster and its Management

Max. Marks : 100/Sem.

Theory : 50 Marks

Practical : 30 Marks

Int. Ass : 20 Marks

Unit -I Introduction :

- a. Hazard, Risk, Vulnerability, Disaster;
- b. Disaster Management, Meaning, Nature Importance, Dimensions & Scope of Disaster Management, Disaster Management Cycle.
- c. National disaster management framework; financial arrangements for Disaster Management, International Strategy for Disaster reduction.

Unit-II Natural Disasters :

- a. Natural Disasters- Meaning and nature of natural disasters, their types and effects
- b. Hydrological Disasters - Flood, Flash flood , Drought, cloud burst
- c. Geological Disasters- Earthquakes, Landslides, Avalanches, Volcanic eruptions, Mudflo
- d. Wind related- Cyclone, Storm, Storm surge, tidal waves
- e. Heat and cold Waves, Climatic Change, Global warming, Sea Level rise, Ozone Depletion.

Unit-III Manmade Disaster :

- a. CBRN – Chemical disasters, biological disasters, radiological disasters, nuclear disasters
- b. Fire – building fire, coal fire, forest fire, Oil fire
- c. Accidents- road accidents, rail accidents, air accidents, sea accidents
- d. Pollution and deforestation- air pollution, water pollution, deforestation, Industrial wastewater pollution, deforestation

Unit-IV Disaster Determinants :

- a. Factors affecting damage – types, scale population, social status, habitation pattern, physiology and climate.
- b. Factors affecting mitigation measures, prediction, preparation, communication, area and accessibility, population, physiology and climate,

Unit-V Introduction :

- a. Essential Components of Disaster Response, Disaster Response Plan, Resource Management- Financial, Medical, equipments, communication, Human, transportation, Food and essential commodity (Identification, Procuring, Propositioning and deployment), Directing and controlling functions
- b. Communication, Participation & activation of Emergency Preparedness Plan, Logistics Management, Emergency support functions, Need and damage assessment
- c. Coordination in Disaster Response Disaster response organization, Disaster response & administration - Central, State, District and Local , Disaster Response: Policy & Other organization, Role of multiple stakeholders in Disaster Response NDRF, SDRF, ITBP, CRPF, SRPF, EMS

Practical Component : Types of knots, General First Aid, Various Bites, Lifting & Carrying Methods.

References :

1. Bose, B.C.(2008): Disaster Management in the 21st Century,
2. Dilip Kumar Sinha(2007)
3. Natural Disaster Reduction: Global Perspectives, South East Asian Realities and Global Strategies (Anthem Press India) [ILLUSTRATED] (Hardcover)-
4. Singh, S.R.(2008) Disaster Management,
5. Rawat, (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation/edited by R.B. Singh. New Delhi.

6. 'National Disaster Management Guidelines' Management of Urban Flooding (September 2010) National Disaster Management Authority, Government of India, NDMA Bhawan, A-1, Safdarjung Enclave, New Delhi - 110 029.
7. Municipal Corporation of Greater Mumbai , Flood Preparedness Guidelines- 2019, website: dm.mcgm.gov.in Mobile App: Disaster Management MCGM.
8. Greater Mumbai District, Disaster management Plan 2018,, Greater Mumbai Disaster Management Authority, Disaster Management Department, MCGM
9. George D. Haddow (2007): Introduction to Emergency Management-, Published by Butterworth-Heinemann.
10. Govt. of India: Disaster Management Act 2005, Government of India, New Delhi.
11. Government of India, 2009. National Disaster Management Policy,
12. Gupta Anil K, Sreeja S. Nair(2011): Environmental Knowledge for Disaster Risk Management, NIDM, New Delhi
13. Kapur Anu (2010): Vulnerable India: A Geographical Study of Disasters, IIAS and Sage Publishers, New Delhi.

Books for Further Reading :

1. Talwar, Arun Kumar, Juneja and Satish (2008) : Encyclopedia of Disaster management (10 volumes)- saujanya books, Delhi
2. Keith Smith (2004) Environmental Hazards: Assessing Risk and Reducing Disaster. Routledge Publication, : New York. Earthquakes: Disaster & Survival (2005) –Jennifer Reed
3. Trivedi, Priyaranjan (Ed.) Delhi, 2007 Encyclopedia of disaster management (12 volumes)-
4. Damon P. Coppola (2006) : Introduction to International Disaster Management.
5. Smith K and Petley DN. (2009): Environmental Hazards: Assessing risk and reducing disaster. 5th edition, Routledge: New York.
6. Abramovitz, J. (2001): Unnatural Disasters. Worldwatch Paper No. 158. Worldwatch Institute: Washington, D.C. (PDF file available on UW-Learn)
7. Parasuraman S, Acharya Niru (2000): Analysing forms of vulnerability in a disaster, The Indian Journal of Social Work, vol 61, issue 4, October
8. Brian Tomaszewski (2014) : Geographic Information Systems (GIS) for Disaster Management- CRC Press, 19-Dec-2014 - Social Science.

SEMESTER- II Disaster Management Cycle & Response

Max. Marks : 100/Sem.

Theory : 50 Marks

Practical : 30 Marks

Int. Ass : 20 Marks

Unit-I Introduction :

Disaster Management Cycle, Disaster Preparedness: concept and significance, Disaster Preparedness Measures, Institutional Mechanism for Disaster Preparedness, Disaster preparedness with special needs/ vulnerable groups, Disaster Preparedness: Policy and Programmes

Unit-II Disaster Preparedness Plan :

Concept and Significance, Disaster Preparedness Plan essentials, Community Based Disaster Preparedness plan

Unit-III Disaster Preparation :

- a. Material, relief required- sources of relief, modes and means of transport, medical facility and communication network, Preparation of manpower, awareness of damages, perception, reaction time. Authority: Hierarchy set-up, direction of communication
- b. Hazard monitoring, tracking and modeling, Early warning systems, warning protocols ,India Disaster Resource Network, Emergency Sanitation/Shelter environments , worst scenario analysis, Emergency operation Centre, Role of Information, Education, Communication and Training
- c. Remote sensing, Disaster Mapping, Aerial Photography, land use zoning, Wireless and Radio, HAM Radio.

- d. Material, relief required- sources of relief, modes and means of transport, medical facility and communication network, Preparation of manpower, awareness of damages, perception, reaction time. Authority: Hierarchy set-up, direction of communication
- e. Hazard monitoring, tracking and modeling, Early warning systems, warning protocols ,India Disaster Resource Network, Emergency Sanitation/Shelter environments , worst scenario analysis, Emergency operation Centre, Role of Information, Education, Communication and Train

Unit-IV Quick Disaster Response :

- a. First responder, medical first aid, life saving techniques, Golden time
- b. Search & Rescue equipments- Search & Rescue equipments for different disasters, its use, procurement, maintenance
- c. Search & Rescue Teams- Warning teams, evacuation teams, medical support, logistic management & other teams
- d. Individual and Group behavior, Psychological Response, Trauma & Stress Management, Rumor & Panic Management

Unit-V Relief Measures :

Relief measures, Minimum standards of relief, managing relief, Funding relief, Recovery

Practical Component : Handling of Electrical Emergencies, Handling of Fire Equipment and general care, Specific First Aid, CPR

Suggested Readings :

- Disaster Administration and Management, Text & Case studies- SL Goel-Deep and Deep Publications
- Disaster Management- G.K Ghosh-A.P.H. Publishing Corporation
- Disaster management – S.K.Singh, S.C. Kundu, Shobha Singh A – 119, William Publications, New Delhi.
- Disaster Management – Vinod K Sharma- IIPA, New Delhi,1995
- Encyclopedia of Disaster Management- Goel S.L. - Deep and Deep Publications, New Delhi, 2006.
