

Department of Geography

Faculty of Natural Sciences

JAMIA MILLIA ISLAMIA NEW DELHI – 110 025

(A Central University by an Act of Parliament)



B.A. (Subsidiary) Disaster Management

Syllabus (w.e.f. 2012-2013)

Course Structure of B.A. (Subsidiary) Disaster Management

Semester-I

Theory Papers

Paper	Title	Credits
DIS-101	Introduction to Disaster Management	4

Semester-II

DIS-201	Disaster Management in India	4
----------------	-------------------------------------	----------

Semester-III

DIS-301	Risk Assessment and Vulnerability Analysis	4
DIS-302	Disaster Mitigation	4

Semester-IV

DIS-401	Disaster Management and Planning	4
DIS-402	Disaster Prevention and Preparedness	4

SYLLABUS

Paper (DIS-101)

INTRODUCTION TO DISASTER MANAGEMENT

Credit: 4

Unit -I: Introduction

Disaster: Definition, Factors And Significance; Difference Between Hazard And Disaster; Natural And Manmade Disasters: Difference, Nature, Types And Magnitude.

Unit -II: Consequences Of Disasters

Repercussions Of Disasters And Hazards: Economic Damage, Loss Of Human And Animal Life, Destruction Of Ecosystem.

Unit -III: Global Perspective (Natural Disasters)

Study Of Environmental Impacts Induced By Human Activity; History Of Disasters And Types Of Hazards: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts And Famines, Landslides And Avalanches.

Unit -IV: Global Perspective (Man-Made Disasters)

Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks And Spills, Outbreaks Of Disease And Epidemics, War And Conflicts.

Books Recommended

1. Bryant Edwards (2005): Natural Hazards, Cambridge University Press, U.K.
2. Carter, W. Nick, 1991: Disaster Management, Asian Development Bank, Manila.
3. Central Water Commission, 1987, Flood Atlas Of India, Cwc, New Delhi.
4. Central Water Commission, 1989, Manual Of Flood Forecasting, New Delhi.
5. Government Of India, 1997, Vulnerability Atlas Of India, New Delhi.
6. Sahni, Pardeep Et.Al. (Eds.) 2002, Disaster Mitigation Experiences And Reflections. Prentice Hall Of India, New Delhi.

Paper (DIS-201)

DISASTER MANAGEMENT IN INDIA

Credit: 4

Unit -I: Disaster Prone Areas In India

Study Of Seismic Zones; Areas Prone To Floods And Droughts, Landslides And Avalanches; Areas Prone To Cyclonic And Coastal Hazards With Special Reference To Tsunami; Post-Disaster Diseases And Epidemics.

Unit -II: Disaster Preparedness And Management

Preparedness: Monitoring Of Phenomena Triggering A Disaster Or Hazard; Evaluation Of Risk: Application Of Remote Sensing, Data From Meteorological And Other Agencies, Media Reports: Governmental And Community Preparedness.

Unit -III: Response To Disasters

Rescue, Relief And Rehabilitation, Role Of National And International Agencies In Disaster Management; National Disaster Policy Of India (Salient Features).

Unit -IV: News Media In Disaster Management

Types Of News Media, Structure And Trends, News Media During Crisis, Impact Of Media On Policy.

Books Recommended

- 1.R. Nishith, Singh AK 2012 Disaster Management in India: Perspectives, issues and strategies New Royal book Company, Lucknow
2. Sharma, Kadambari C, Avina 2010 Disaster Management in India Jnanada Prakashan [P&D], New Delhi
- 3.Mishra A 2012 New Dimensions of Disaster Management in India: Perspectives Approaches and Strategies (Set of 2 Vols) Serials publications, New Delhi
- 4.Dagur OS Disaster Management: An Appraisal of Institutional Mechanisms in India Center for Land Welfare Studies,
- 5.Sinha P. C. 2006 Disaster Mitigation: Preparedness, Recovery and Response . SBS Publication & Distributions Pvt. Ltd. New Delhi
- 6.Goel S. L. 2007 Disaster Administration And Management Text And Case Studies Deep & Deep Publication Pvt. Ltd., New Delhi
- 7.Dhunna M 2001 Disaster Management Vayu Education Of India, New Delhi.

Paper (DIS-301)

RISK ASSESSMENT AND VULNERABILITY ANALYSIS

Credit: 4

Unit- I- Disaster Risks

Disaster Risk: Concept And Elements, Disaster Risk Reduction, Global And National Disaster Risk Situation.

Unit- II- Disaster Risk Assessments

Techniques Of Risk Assessment, Global Co-Operation In Risk Assessment And Warning, People's Participation In Risk Assessment. Strategies For Survival.

Unit- III- Vulnerability Analysis

Vulnerability Concept And Parameters, Risk And Vulnerability Relationship, Observation And Perception Of Vulnerability, Vulnerability Identification, Socio-Economic Factors Of Vulnerability, Vulnerability Analysis.

Unit- IV- Techniques Of Risk And Vulnerability Analysis.

Risk Assessments And Vulnerability Analysis Techniques, Remote Sensing And Gis Basic Concepts And Elements.

Books Recommended

1. Berry, J.K. 1986. Learning Computer Assisted Map Analysis. In Geographic Information System, Part Iii: 39-43
2. Blaikie, P., T. Cannon, L. Davis, And B. Wisner. 1994. At Risk: Natural Hazards, People's Vulnerability And Disasters. London: Routledge.
3. Burton, I.R, W. Kates And G.F. White. 1994. The Environment As Hazard. Harlow: Longman.
5. Degg, M.R. 1992. Natural Disaster: Recent Trends And Future Prospects. Geography.
6. Government Of India. 1997. Vulnerability Atlas Of India. New Delhi.
7. Haque, C.E. And D. Blair. 1992. Vulnerability To Tropical Cyclones: Evidence From The April 1991 Cyclones In Coastal Bangladesh. Disasters 16:2.17-29.
8. Hewitt, K. 1997. Region Of Risk. Harlow: Longman.

Paper (DIS-302)

DISASTER MITIGATION

Credit: 4

Unit - I: Disaster Mitigation

Meaning, Concept And Strategies Of Disaster Mitigation, Emerging Trends In Mitigation.

Unit – II: Institutionalization Of Disaster Mitigation

Role Of Team Co-Ordination And Emergency Coordination Agencies.

Unit - III: Types Of Mitigation

Structural Mitigation And Non-Structural Mitigation, Community Basis Mitigation.

Unit - IV: Disaster Mitigation: Role Of Communication, Leadership And Co-Ordination

- Disaster Communication
- Disaster Leadership
- Programs Of Disaster Mitigation In India.

Books Recommended

1. Office Of The United Nations Disaster Relief Coordinator. 1970. National Disaster And Vulnerability Analysis, Report Of Expert Group Meeting.
2. Organisation Of American States. 1984. Natural Hazard Risk Assessment And Disaster Mitigation Pilot Project In Latin America And The Caribbean Basin. Washington, D.C.
3. Roy, P.S. 2008. Space Technology For Disaster Management: A Remote Sensing & Gis Perspective, Indian Institute Of Remote Sensing (Nrsa), Dehradun.
4. Undro. 1980. Natural Disasters And Vulnerability Analysis: Report Of Expert Group Meeting Geneva: Udnro.
5. Utria, B.E. 1988. Notes On The Application Of Geographic Information Systems In Natural Hazards Risk Assessment And Development Planning At National And Metropolitan Levels. Washington, D.C.: Organisation Of American States.

Paper (DIS-401)

DISASTER MANAGEMENT AND PLANNING

Credit: 4

Unit - I - Disaster Management: Concept And Elements.

Pre-Disaster Management, Post Disaster Management, Integrated Developmental Planning For Disaster Management, Long Term Disaster Counter Planning.

Unit - II - Post Disaster Management

Search, Rescue, Evacuation And Other Logistic Management, Relief.

Unit - III – Disaster Management Planning

Management Of Essential Supplies And Temporary Shelter, Site Management, Medical Trauma And Stress Management, Post Disaster Rehabilitation And Reconstruction.

Unit - IV – Early Warning And Prediction Systems.

Role Of IT, RS, GIS, GPS And ICS.

Books Recommended

1. Barrow, C.J. 1995. Developing The Environment: Problems And Management. Harlow: Longman.
2. Bender, S.O. 1987. Natural Hazard Assessment In Integrated Regional Development. In Proceedings Of The International Symposium On Housing And Urban Development After Natural Disasters. Washington, D.C.: American Bar Association.
3. Berke, P.R., J. Kartez And D. Wegner. 1993. Recovery After Disaster: Achieving Sustainable Development, Mitigation, And Equity. *Disaster*, 17. 93-109.
4. Bryant Edwards. 2005. *Natural Hazards*. Cambridge: Cambridge University Press.
5. Burkle, F.M. Jr. 2001. Disaster Management, Disaster Medicine And Emergency Medicine. *Emerging Med*;13: 143-144.
6. Carater, W.N. 1991. *Disaster Management*. Manila: Asian Development Organisation.
7. Daines, G.E. 1991. Planning, Training, And Exercising. In *International City/Country Management Association. Emergency Management: Principles And Practice For Local Government*, Washington, D.C.: 161-200.
9. Khalil, G.M. 1992. Cyclones And Storms Surges In Bangladesh: Some Mitigative Measures. *Natural Hazards* 6:11-24.S

Paper (DIS-402)

DISASTER PREVENTION AND PREPAREDNESS

Credit: 4

Unit-I: Disaster Preparedness

Concept And Nature, Disaster Preparedness Of People And Infrastructure, Community Based Planning.

Unit-II: Role And Responsibilities Of Different Agencies And Governments In Disaster Preparedness

Educational Institutions, Local District And State Administration, Armed Forces, Paramilitary Forces, Police And NGO'S.

Unit -III: Disaster Prevention

Concept And Elements, Public Awareness, Role Of Education And Training In Disaster Prevention.

Unit - IV: Disaster Preparedness Programs

Earthquake And Cyclone Disaster Preparedness, Early Warning Systems, Floods And Drought Disaster Preparedness Programs.

Books Recommended

1. Nasios, A.S. 1990. Disaster Mitigation And Economic Incentives In Colloquim On The Environment And Natural Disaster Management. Washington, D.C.: The World Bank.
2. Nojri, E. 2005 Public Health Issues In Disasters. Crit Care Med. 33: 529-533.
3. Organisation Of American States. 1984. Integrated Regional Development: Guidelines And Case Studies From OAS Experience. Washington, D.C.: The World Bank.
4. Smith, K. 1992. Environmental Hazards: Assessing Risk And Reducing Disaster. London: Routledge.
5. Taori, K. 2005. Disaster Management Through Panchayati. New Delhi: Concept Publishing Comapany.
6. United Nations Disaster Relief Organization. 1978. Disaster Prevention And Mitigation: A Compendium Of Current Knowledge. New York: United Nations.
7. United Nations, Office Of The Disaster Relief Coordinator. 1988. Disaster Mitigation: A Manual For Planners, Policy Makers, And Communities. Geneva: United Nations Press.