

Defence and Strategic Studies

**Post Graduate Diploma In
Defence and Disaster Management
(CBCS)
2023-24**

Syllabus



Defence and Strategic Studies Centre
Faculty of Arts, Education and Social Sciences
Jai Narain Vyas University, Jodhpur (Raj.)

Defence and Strategic Studies Centre

(Session 2023-24)

Syllabus

Post Graduate Diploma in Defence and Disaster Management

Semester Ist

Level/Sem.	Nature of Course	Course Code	Course Title	EOSE	CA	L	T	P	Credits
L 8 I st	Discipline Centric Core Course	DDM8001T	Introduction to Natural & Man-made Disasters	70	30	4	0	0	4
		DDM8002T	Disaster Response and Disaster Management	70	30	4	0	0	4
		DDM8003T	Study of disaster relief hero's, Field Study Report and Viva-Voce	70	30	4	0	0	4
	Discipline Specific Elective	DDM8004T	National Defence & Security Management	70	30	4	0	0	4
		DDM8005T	Disaster Preparedness	70	30	4	0	0	4
		DDM8006T	India's Internal Security Challenges	70	30	4	0	0	4
Total Credits								20	

Semester IInd

Level/Sem.	Nature of Course	Course Code	Course Title	EOSE	CA	L	T	P	Credits
L 8 II nd Semester	Discipline Centric Core Course	DDM8007T	Disaster Management, Indian Armed Forces & State Mechanism	70	30	4	0	0	4
		DDM8008T	Disaster Management : Planning Reconstruction and Recovery	70	30	4	0	0	4
		DDM8009T	Fundamentals of Research, Field Study and Viva-Voce	70	30	4	0	0	4
	Discipline Specific Elective Course (Any Two)	DDM8010T	Post Disaster Psychological Issues	70	30	4	0	0	4
		DDM8011T	Study of Military Psychology	70	30	4	0	0	4
		DDM8012T	Risk Assessments, Vulnerability and Preparedness Analysis	70	30	4	0	0	4
Total Credits								20	

PG Diploma in Defence and Disaster Management
(Level 8)
(Session 203-24)

Theory Paper DDM8001T: Introduction to Natural & Man-made Disasters
Mark Duration of each theory paper Examination.

100
3Hrs

Discipline **Centric Core** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Introduction to Natural & Man-made Disasters

Course objective:- *This course focuses on the Introduction of Natural & Man-made Disasters in the context of Disaster Management. The purpose is to give comprehensive knowledge about changing nature of disaster.*

UNIT-I

Understanding Disasters : Meaning, nature, characteristics and types of Disasters, Causes and effects, Disaster: A Global View, Disaster Profile of India, The Disaster Management cycle.

UNIT-II

Geological and Mountain Area Disasters : Earthquakes. Volcanic Eruption , Landslides , Snow Avalanches

UNIT-III

Wind and Water Related Natural Disaster: Floods and Flash Floods Droughts , Cyclones , Tsunamis

UNIT-IV

Climate Change: Global Warming , Sea Level Rise , Ozone Depletion

UNIT- V

Man Made Disasters : Understanding Man-Made Disasters , Fires and Forest Fires , Nuclear, Biological and Chemical disaster. Road Accidents, Rail Accidents , Air Accidents , Sea Accidents, Pollution

Suggested Readings:

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.

Discipline **Centric Core** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objective:- *This course focuses on analysis of disaster response and disaster management. Motto is to equip student in understanding the Disaster management system of particular area where it will be used in village, city, metropolitan area or state. Student should able to comprehend the way, how and when they respond about any type of disaster.*

Disaster Response and Disaster Management

UNIT-I

Reconstruction and Rehabilitation as Means of Development , Strategies for Survival , Damage Assessment , Role of various Agencies in Disaster Management and Development, Information Management Structure , Development of Physical and Economic Infrastructure.

UNIT-II

Creation of Long-term Job Opportunities and Livelihood Options, Funding Arrangements for Reconstruction, Nature of Damage to Houses and Infrastructure due to Disasters, Disaster Resistant House Construction , Role of Housing/ Building Authorities.

UNIT-III

Education and Awareness, The Philosophy of Coping with Disasters, Dealing with Victims' Psychology Role of Information Dissemination.

UNIT-IV

Role of Various Agencies in Recovery Measures, Monitoring and Evaluation of Rehabilitation Work, Constraints in Monitoring and Evaluation, Long-term Recovery , Long-term Counter Disaster Planning.

UNIT-V

Response Essential Components, Disaster Response Plan, Communication, Participation and Activation of Emergency Preparedness Plans, Search, Rescue, Evacuation and other logistic management, Needs and Damage Assessment; Types and Technique

Suggested Readings:

1. *Bryant Edwards (2005): Natural Hazards, Cambridge University Press, U.K.*
2. *Kasperson, J.X., R.E. Kasperson, and B.L. Turner III (Eds.), 1995, Regions at Risk: Comparisons of Threatened Environments, United Nations University Press, Tokyo*
3. *Singh Satendra (2003): Disaster Management in the Hills, Concept Publishing Company, New Delhi.*
4. *White, G.F, 1974, Natural Hazards: Local, National, Global, Oxford University Press, New York.*
5. *Taori, K (2005) Disaster Management through Panchayati Raj, Concept Publishing Company, New Delhi.*
6. *www.nidmindia.nic.in*
7. *http://www.cambridge.org*

Theory Paper DSS8003T: Study of disaster relief hero's, Field Study Report and Viva-Voce 100 Mark

Duration of each Practical paper Examination.

3Hrs

Discipline **Centric Core** Course

(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Study of disaster relief hero's, Field Study Report and Viva-Voce

UNIT- I

Study of Hero's served Major disaster relief Operations, Gallantry Awardees after independence. (from Nearby Villages, Cities, District, Division)

UNIT- II

Historical infrastructure and their civil engineering related to disaster management at importance places like Fort, Palace, ground etc available in Jodhpur division.

UNIT- III

Case study of past disasters occurred in India like, Bhopal gas tragedy 1984, Tsunami 2004, Kedarnath aapda 2013 etc.

UNIT- IV

Role of Airforce, Army, BSF, Police, BRO, DRDO, Paramilitary forces etc in Disaster Management

UNIT- V

Field visit of Chemical Industries, Historical Buildings and important locations/area/base etc & other fields of disaster management

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objective:- *This course focuses on the National Security in the context of Disaster Management. The purpose is to give comprehensive knowledge about changing nature of security and security discourses have change in post-cold war globalized world. Disasters are becoming the constituent unit of national security.*

National Defence & Security Management

UNIT-I

Civil Defence: Meaning, aim, organization and need, Role of civil defence before and after of war, Civil and Military relation, Pillars of Peace.

UNIT-II

India's Nuclear Programme, India's Nuclear policy and its Doctrine, Missiles development, Type and its impact.

UNIT-III

Chemical and Biological weapons, International Treaties banning Chemical and Biological weapons, Military Applications of laser rays.

UNIT-IV

Internal security problems of India, Insurgency, Nexalism, Secessionism and terrorism, Economic security, Water security and environmental security, Energy security and human security.

UNIT-V

Conceptual frame work of National Security, Evolution of National Security thinking in new perspective, Challenge to security: Individual, Sub-National, National, Regional and International.

Suggested Readings:

1. *World Army through the age: Col. Gautam Sharma.*
2. *Battle of World History: Col. Maleson.*
3. *People, State and Fear: Barry Buzam.*
4. *National Security: K. Subrainanyam.*
5. *India's Foreign Policy : J.N. Dixit.*
6. *Asian Security : Air Comdr. Jasjit Singh.*
7. *India's Foreign Policy : J. Bandopadhya*
8. *Asean Security : Air Comdr, Jasjit Singh.*
9. *Antarrashtriya Rajniti – B.L. Fadia.*

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objectives:- *This Course focuses on natural and manmade disasters; this course is divided in two Sections. First section gives comprehensive knowledge of natural disasters and its impact of human life. Second section gives comprehensive knowledge of man-made disasters its origin and impact on human life.*

Disaster Preparedness

UNIT-I

Introduction to Disaster Preparedness : Disaster Management: Prevention, Preparedness and Mitigation, Disaster Preparedness: Concept & Nature.

UNIT-II

Roles & Responsibilities of Different Agencies and Govt, Roll of Information, Education, Communication & Training, Role and Responsibilities of Central, State, District and local administration.

UNIT-III

Technologies for Disaster Management, Role of IT in Disaster Preparedness, Remote Sensing, GIS and GPS,

UNIT-IV

Disaster Mitigation, Disaster Mitigation: meaning and concept , Disaster Mitigation Strategies.

UNIT-V

Relief Measures, Minimum Standard of Relief, Relief Management- essential components,

Suggested Readings:

1. *Bryant Edwards (2005): Natural Hazards, Cambridge University Press, U.K.*
2. *Roy, P.S. (2000): Space Technology for Disaster management: A Remote Sensing & GIS Perspective, Indian Institute of Remote Sensing (NRSA) Dehradun.*
3. *Sharma, R.K. & Sharma, G. (2005) (ed) Natural Disaster, APH Publishing Corporation, New Delhi.*
4. *www.GIS. Development.net*
5. *www.iirs.nrsa.org*
6. *http://quake.usgs.gov*

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

India's Internal Security Challenges

Unit-I

Internal Security Challenges, Terrorism Threat to India,
J&K Militancy, Organized Crime,

Unit-II

Insurgency in North-East ,Security challenges in Border Areas, Communal Violence

Unit III

Basics of Cyber Security, Cyber Warfare, Social Media and Internal Security Threat,

Unit-IV

Various Security Forces and Their Mandate, Governance Issues Related to Internal Security,
National Security Mechanism. Strategy for Coastal and Offshore Security.

Unit-V

Left Wing Extremism (Naxalism): A war upon the state, Its Phases, Frontal Organisation of LWE,
Tactical Counter Offensive Campaign, Its relations with other terrorist groups, Methods: How to fight it
in present and future.

SUGGESTED READINGS

1. *D.G.Chandler, The Atlas of Military Strategy: the art, theory and practice of war (London, 1980)*
2. *Field Marshal, Montgomery, Viscount., A History of Warfare, (London:Collins,1968).*
3. *Fuller, J.F.C., The Foundation of the Science of War (London, 1925)*
4. *Galtung, Johan., The Struggle for Peace, (Ahamedabad: Gujarat Vidyapeeth,1986).*
5. *Michael Howard, (ed), The Theory and Practice of War, 1965.*
6. *Palit, D.K., Essentials of Military Knowledge, EBD Dehradun.*
7. *Philip, T.R., (ed), Roots of Strategy, 1943. 000*
8. *Singh, L.J., Nature of War & North African Campaign (Hindi)*

Second Semester

Theory Paper DDM8007T: Disaster Management, Indian Armed Forces & State Mechanism
Duration of each theory paper Examination.

100 Mark
3Hrs

Discipline **Centric Core** Course

(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objectives:- *This course is focuses on functioning of state mechanism. In India, government is the primary respondent to disastrous situation. It is vary crucial to study the sate mechanism and its functional unit. The course will give detail information about functioning of the disasters management institution mechanism at: District, State and National Level.*

Disaster Management, Indian Armed Forces & State Mechanism

UNIT-I

1. Disaster Management Policy Framework of Government of India: Act and Its Implications
2. Disaster Management Institutional Structure: National, State and Local

UNIT-II

3. NDMA & NDRF: Organizational, Structure, Role and Responsibility in Disaster Management
4. Incident Response System, Emergency Operation Centre and Emergency Support Functions; Role Geographical Information System in Disaster Management

UNIT-III

5. Disaster Response: Police and Other Forces, civil societies ,Training and coordination for efficient Disaster Management Disaster Preparedness:
6. Evolution of Role Indian Armed Force in Disaster Management

UNIT-IV

7. Role, Capability & Responsibilities: Police, Para-Military Forces & Central Armed Police Forces.
8. Logistics Management and Financial Arrangements

UNIT-V

9. Indian Armed Forces and International Disaster Management Cooperation and Coordination Mechanism
10. Role of International Agencies, Non-Governmental Organizations, Community Based Organizations, Community, and Media.

Reference

- Dave, R. K. (eds.) (2007), *Disaster Management in India: Challenges and Strategies*, London: Taylor & Francis.
- Gautam, Siddhartha (et. al.) (2012), *Disaster management: Programmes and policies*, New Delhi: Vista International Publishing House.
- Ghanekar V. V. (2007), *Disaster Management Act and Management*, Pune: Institute of Rural Development and Education.
- Kirschenbaum, Alan, (eds.) (2003), *Chaos Organization And Disaster Management*, CRC Press.
- Kapucu, Naim and Kuotsai Tom Liou (eds.) (2014), *Disaster and Development: Examining Global Issues and Cases*, Switzerland: Springer.
- Minear, L. and T. Weiss, (1992), *Humanitarian Principles and Operational Dilemmas in War Zones*, Disaster Management Training Programme, Geneva: United Nations Development Programme.
- Pal, Indrajit and Tuhin Ghosh (2018), *Natural Hazards Management in Asia*, Sage: New Delhi.
- Shrader- Frechette, K, (1991), "Ethical Dilemmas and Radioactive Waste: A Survey of Issues", *Environmental Ethics*, 13, 327-343.

Discipline **Centric Core** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objectives:- *This course essentially focuses on Post Disaster Activities. Student will learn about Reconstruction and Recovery of people and region. Course designed to build Comprehensive approaches of student to bring normalcy in life of affected people*

Disaster Management: Planning, Reconstruction and Recovery

UNIT- I

1. Fundamentals of Disaster Management Planning
2. Concept of Response to Disasters
 - a. Monitoring process
 - b. Evacuation procedures under different contingencies
 - c. Organizing Search and Rescue and Concepts
 - d. Organizing EOC and IRS during Response

UNIT-II

3. Relief, Rehabilitation and Reconstruction (Compensation, Economic Restoration)
4. Role of NGOs and Community

UNIT-III

5. Preparation of Disaster Management Plan :
6. Reconstruction and Rehabilitation.

UNIT-IV

7. Damage Assessment
8. Role of Various Agencies in Reconstruction and Rehabilitation

UNIT-V

9. Development of Physical, Economic and Social Infrastructure
10. Community based approaches for disasters resilient response

Reference

- Bissell, Rick, Steven Jensen, Shirley Feldman-Jensen (2013), Preparedness and Response for Catastrophic Disasters, U.S.: Taylor & Francis.*
- Bruce W. Clements (2009), Disasters and Public Health: Planning and Response, U.K.: Elsevier.*
- Chan, Emily Ying Yang (2017), Public Health Humanitarian Responses to Natural Disasters, New York: Routledge.*
- Coppola, Damon P. Introduction to International Disaster Management, U.K.: Elsevier.*
- Cuny, F. C. (1983), Disaster and Development, New York: Oxford University Press.*
- Dasgupta, Rajdeep (2007), Disaster management and rehabilitation, New Delhi: Mittal publications.*
- Fischer, Henry W. (1998), Response to Disaster: Fact Versus Fiction & Its Perpetuation : the Sociology of disaster, Lahman: University Press of America.*
- Siddhartha Gautam, K Leelakrishna Rao and N Jagannatha Murthy (2012), Disaster management: Programmes and policies, New Delhi: Vista International Publishing House.*
- Shaw, Rajib (2015), Recovery from the Indian Ocean Tsunami: A Ten-Year Journey, London: Springer.*

Discipline **Centric Core** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Fundamentals of Research, Field Study and Viva-Voce

Unit I

Essentials and Fundamentals of Research work , Meaning, Nature, Scope, tools and techniques.

Unit II

Research Methodology, Hypothesis, ROL, field survey and reports

Unit III

Writing ethics, Academic Integrity, Plagiarism, Qualities of Good Researcher

Unit IV

Collection of best articles on defence and securities related issues and their research analysis report with further evidence

Unit V

Dissertation writing :- Students are advised to select their topic in consultation with their guide. Dissertation will evaluate by expert in concern field and marks will be given by the quality of research work. Deserption may be publish in Book form without permission of students. It will be the copy right and property of Department of Defence and Strategic Studies and Jai Narain Vyas University, Jodhpur (Raj.) only.

Format of Submission:

- (a) Students are required to submit TWO Copies of the dissertation, duly typed and bound.
- (b) Use A4 size paper and use Times New Roman script with 12 font size and one and a half spacing for lines.

Evaluation

1. The evaluation shall be done by the Internal Examiner (Guide) and one External Examiner from within the Department. (Evaluation done in a combined manner for 50 marks)
2. Students would have to make a presentation in the Department. (*Evaluation done by the Guide and the External Examiner who evaluates the written report and Viva Voce in a combined manner for 20 marks*)

3. Evaluation System

a. Evaluation: Dissertation:	50 Marks.
b. Viva Voce:	20 Marks
c. Internal Continuous Assessment:	30 Marks
Total:	100 marks.

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objectives:- *Psychological research has shown that disasters can cause serious mental health Problems for disaster victims. The Objectives of course is to understand the mindset and mental balance of affected people after the hit of disaster. To educate about post traumatic disorders. To aware about psychological wellbeing. To study coping strategies for post disaster psychological management.*

Post Disaster Psychological Issues

UNIT-I

Psychological Wellbeing

- a. Nature And Definition Of Psychological Wellbeing
- b. Types Of Wellbeing
- c. Awareness Of Psychological Wellbeing

UNIT-II

Stress

- a. Nature Of Stress
- b. Types Of Stress
- c. Theories Of Stress

UNIT-III

Role of Media, Common men (citizen), Counselors and Psychiatrist, post disaster challenges for Government and other organisations for controlling the situation

UNIT-IV

Psycho-Social Aspect Of Disaster Management

- d. Nature Of Psychological And Social Response To Disaster
- e. Trauma And Stress Related Disorders
- f. Social Awareness About Disaster Management

UNIT-V

Coping With Disaster Management

- g. Stress Management
- h. Treatment And Therapies
- i. Psychological Rehabilitation And Reconstruction And Recovery

References:

1. Arora, Rajesh And Preeti Arora (eds.) (2013), *Disaster Management: Medical Preparedness, Response and Homeland Security*, U.K.: CAB International.
2. Gist, Richard, Bernard Lubin (1999), *Response to Disaster: Psychosocial, Community, and Ecological Approaches*, London: Routledge.
3. Miller, Joshua L. (2012), *Psychosocial Capacity Building in Response to Disasters*, New York: Columbia University Press.
4. Reyes, Gilbert and Gerard A. Jawabos (2006), *Handbook of International Disaster Psychology*, Praeger: U. K.
5. Sarason, I.G. and Sarason, B.R. (2011), *Abnormal Psychology: The problems of maladaptive behaviour*, New Delhi: Pearson Edu.
6. Ursanu, Robert J. (et. all) (2017), *Textbook of Disaster Psychiatry, 2nd edition*, U.K.: Cambridge University Press.
7. Satapathy S. (2009), *Psychosocial care in Disaster management, A training of trainers manual (ToT)*, NIDM Publication.

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Study of Military Psychology

Unit I

Meaning of psychology and its development
Importance and relation of psychology in war
Tools of Psychological Warfare

Unit II

Utility of military psychology
Adjustment in training period, Adjustment in war period, Command capability and rest
Human factors in fighting forces
Vocational Fitness, Method of Selection

Unit III

Aim of discipline and treatment of indiscipline
Importance, kinds and problems of discipline

Unit IV

Importance, advantage and kinds of Military leadership in armed forces
Meaning of morale and its importance in armed force.
Significance of Personality Development

Unit V

Principles of morale and elements of effective morale
Man-management , Motivation , Interview, Aptitude
Causes of Fear and panic in war, problems and treatment of fear, Fatigue, War Neurosis

RECOMMENDED BOOKS

1. *Psychology and the soldier* : F.C. Vartley
2. *Psychology and the soldier* : Contacted
3. *Sainya Manovighan* : Dr. Parshuram Gupta
4. *Sainya Manovigyan* : Pushpa Jain, Prakash Book Depot, Barailey
5. *Sainya Manovigyan* : Dr. Lallan Singh

Discipline **Specific Elective** Course
(Credits 4 ; 60 Hrs; M.M.100 = 70 End Sem. Exam + 30 Internal continuous Assessment)

Course Objectives: This course focuses on analysis of Risk and vulnerability. Motto is to equip student in understanding the vulnerability of particular area whether it is village, city, metropolitan area or state. Student should able to comprehend the why, how and when (possibility) of disaster incident.

Risk Assessments, Vulnerability & Preparedness Analysis

UNIT-I

1. Hazard, Risk ,Vulnerability and Disaster Preparedness: Conceptual Framework
2. Risk: Assessment & Analysis

UNIT-II

3. Vulnerability: Natural ,Social & Economical
4. Resource Analyses and Mobilisation;

UNIT-III

5. Preparation of Disasters Management Plan: City, Institution & Relief Camp
6. Prevention, Preparedness & Mitigation of Disasters: Natural & Manmade.

UNIT-IV

7. Disaster Preparedness Plan: National, State, Districts and Community Based Disaster Preparedness Planning ;Urban and Rural Preparedness approaches

UNIT-V

8. Risk Assessment And Reduction During Festival And Rallies
9. Risk Associate with Fire Control Technology

Reference

- Greenberg, Michael I. (2006), *Encyclopaedia of Terrorist, Natural & Man-Made: Disasters*, United Kingdom: Jones & Bartlett.
- Masellis, Michele, and S. William A. Gunn (Eds.) (2012), *The Management Of Burns And Fire Disasters: Perspectives 2000*, Netherland: Springer Science & Business Media.
- Marathe, P. P. (2006), *Concepts and practices in disaster management*, Pune: Diamond Publications.
- Moral, Roger del & Lawrence R. Walker (2007), *Environmental Disasters, Natural Recovery and Human Responses*, UK: Cambridge University Press.
- Pelling, Mark (2003), *Vulnerability of Cities: Natural Disasters and Social Resilience*, London: Earth scan.
- Parasuraman, S. (2000), *India Disaster Report towards Policy Initiative*, New York: Oxford University Press. Shaw, Rajib (Eds.) (2009), *Disaster Management: Global challenges and local solutions*. Universities Press. Singh, R. B. (2006), *Natural Hazards And Disaster Management: Vulnerability And Mitigation* Jaipur: Rawat publications.

