

JHARKHAND RAKSHA SHAKTI UNIVERSITY, RANCHI



Post Graduate Diploma Programme in Disaster Management (PGDDM)

Detailed Syllabi

(w.e.f. Academic Year 2026-27)

DEPARTMENT OF PUBLIC SAFETY & DISASTER MANAGEMENT

[Duration: One Year]

Course Structure

Post Graduate Diploma in Disaster Management (PGDDM) (1-Year Program)

CREDIT DISTRIBUTION IN FOUR SEMESTERS

(40 CREDITS IN TOTAL)

SEMESTER 1

Summarized Credits for the PGDDM – Semester 1										
Course Code	Course	Full Mark	Mid Semester		End Semester		Teaching Scheme			Hour
			FM	PM	FM	PM	Credit	TH	PR	
PGDDM - 101	Introduction of Disaster Management	100	30	13	70	32	4	4	0	60
PGDDM -102	Disaster Governance Frameworks	100	30	13	70	32	4	4	0	60
PGDDM - 103	Research Methodology	100	30	13	70	32	4	4	0	60
PGDDM -104	Information Communication Technology and Remote Sensing in Disaster Management and Developmental Planning	100	30	13	70	32	4	2	2	90
PGDDM - 105	Traditional – Indigenous Knowledge and Disaster Risk Reduction	100	30	13	70	32	2	2	0	30
PGDDM - 106	Field Work	100	-	-	100	40	2	0	2	60
TOTAL		600					20			360

Skill Enhancement Paper: PGDDM -104, Value Addition Paper: PGDDM – 105

FM: Full Marks, PM: Pass Marks, TH: Theory, PR: Practical

YEAR 1
SEMESTER I: PAPER- 1

Course Title	Introduction of Disaster Management		
Course Code	PGDDM- 101	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Core Paper
Credit	Four (4)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to provide the foundational understanding on disaster management with the introductory concepts and principles. Learners will be equipped with knowledge to comprehend the DM cycle, understand types and nature of hazard, vulnerability and risk.			
Course Outcomes			
After the successful completion of the course, students will be able to:			
➤ Understand the fundamental principles of hazard, vulnerability, risk and capacities.			
➤ Identify hazard, vulnerability, risk and capacities at individuals, institutional and community level.			
➤ Assess HRVC of a geographical area.			
➤ Analyse the impact of disasters on environment and society, disaster vulnerabilities and risk in the communities.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Introduction of Disaster Management		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Lecture Hours
Unit- 1	Introductory Concept of Disaster Management Key Terminologies of Hazard, Vulnerability, Risk, Exposure, Coping Capacity, Resilience, Disaster, Emergencies; Disaster Management – DM Cycle – Phases of Disaster, Prevention, Preparedness, Mitigation, Capacity Building. Concept of DRR & DRM, Methods of Hazard, Vulnerability and Capacity Assessment (HVCA), Components of Disaster Relief – Food, Water, Health, Shelter, Sanitation and Waste Management; Hazard and Vulnerability profile of India–Regional Hazard, Risk and Vulnerability, Recent Development and Paradigms.	15
Unit- 2	Natural Hazards Classification, Cause and Impact of Natural Hazards; Geological Hazards – Earthquake, Volcano Eruption, Avalanches, Landslide, Subsidence; Hydrological Hazards – Floods, Glacial Lake Outburst Flood; Meteorological and Climatic Hazards – Cyclone, Tsunami, Extreme Weather Events, Droughts, Lightning, Forest Fire, Snakebite; Biological Hazard – Pandemic, Epidemic, Insect Infestation, Animal Stampede; Case studies of Natural Hazards.	15
Unit- 3	Anthropogenic Hazards Classification, Cause and Impact of Anthropogenic Hazards – Chemical, Biological, Radiological and Nuclear (CBRN) Hazards; Socio-Political hazards – Civil disorder, Conflict, Riots, Massacre, Genocide, Terrorist attack, Bomb Blast, Naxalism War; Technological/Industrial Hazards – Building Fire, Mine fire, Chemical and Oil Spill Explosion, Engineering failure; Transportational Hazards – Rail Accident, Road Accident, Aircraft Accidents, Boat Capsizing; Pollution – Air, Water, Industrial,	15

	Biomedical, Environmental Pollution; Human Hazard – Stampede, Poisoning, Famine; Case studies of Manmade Hazards.	
Unit- 4	Concepts of Hazard, Risk Vulnerability & Capacity (HRVC) Analysis Concept of Hazard, Vulnerability & Capacity – Exposure, Sensitivity and Adaptive Capacity, Elements of Vulnerability (Social, Physical, Economic and Environmental Vulnerability), Vulnerability Identification and Assessment. Concept of Risk – Element of Risk, Types of Risk (Adaptive, Routine, Participatory Risk etc), Risk Assessment and its Processes – Risk Reduction Strategies. Disaster Impact Assessment- Landscape planning.	15

Suggested Readings:

- Goyal, Pradeep K. and Gupta, Anil K. (2023). Disaster Management. AICTE
- Kumar, P. (2023). Disaster Management: Preparedness, Response, Recovery, Mitigation. OakBridge
- Pandey, Mrinalini. (2023). Disaster Management. Wiley Publication. Second edition
- Pal, Indrajit and Shaw, Rajib. (2018). Disaster Risk Governance in India and Cross Cutting Issues. Springer Publication
- Parasuraman S, and Unnikrishnan P.V. Disaster Response in India: An Overview
- Paul, Bimal Kanti. (2011). Environmental Hazards and Disasters: Context, Perspectives and Management. Wiley-Blackwell Publication
- Eslamian, Saeid and Eslamian, Faezeh. (2022). Handbook of Disaster Risk Reduction for Resilience: New Framework for Building Resilience to Disaster. Springer Publication

Note: Latest edition of text books may be used.

YEAR 1
SEMESTER I: PAPER- 2

Course Title	Disaster Governance Framework		
Course Code	PGDDM- 102	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Core Paper
Credit	Four (4)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to provide comprehensive understanding of disaster governance frameworks at local, national and global level. Learners will be equipped with governance structure, legal frameworks and institutional mechanism in disaster management. This will prepare learners to critically assess the existing frameworks and develop understanding on the key stakeholders in disaster governance system.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Understand the institutional mechanisms from local to global levels.			
➤ Analyse the policies and plans related to disaster management.			
➤ Develop skills to coordinate with government agencies, NGOs, and communities for comprehensive disaster management.			
➤ Outline the institutional framework of DRR at various level.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Disaster Governance Framework		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Lecture Hours
Unit- 1	Disaster Management Governance Framework Disaster Management Act 2005 and its Amendments, State-specific Acts, National Policy on Disaster Management, National Disaster Management Plan, State Disaster Management Plan (SDMPs), District Disaster Management Plan (DDMPs), Prime Minister Ten-point Agenda for Disaster Risk Reduction. International instruments – Sendai Framework for DRR (2015-30), Hyogo Framework for Action (2005-15), Yokohama Strategy, Sustainable Development Goals (SDGs), Intergovernmental Panel on Climate Change (IPCC), Paris Agreement, Sphere Humanitarian Standards, Core Humanitarian Standards, The Core Humanitarian Standards on Quality and Accountability, Minimum Economic Recovery Standards, The Livestock Emergency Guidelines and Standards, DRR related Guidelines by NDMA and other Institutions.	15
Unit- 2	Administrative Structure National Disaster Management Authority (NDMA), National Institute of Disaster Management (NIDM), State Disaster Management Authority (SDMA), District Disaster Management Authority (DDMA), National Disaster Response Force (NDRF), State Disaster Response Force (SDRF), Urban Local Bodies, Urban Disaster Management Authority (UDMA), Panchayati Raj Institution (PRI), Scheduled V & Scheduled VI Area, Village Development Programs and other Line Departments.	15
Unit- 3	Incident Response System (IRS) Response Mechanism– Evolution and Concept of IRS, Principles, Feature and Importance of IRS in Disaster Response, Organizational Structure and Function of IRS, Standard Operating Procedures (SOPs) in Disaster Response, Rapid Damage and Need Assessment (RDNA),	15

	Onsite and Off-site Incident Response Plan, Documentation and Reporting Systems. Case studies.	
Unit- 4	Disaster Financial Management Concept, Scope, Importance of Financial Management in DRR, Finance Commissions in Disaster Management, Concept of Disaster Financing, Disaster Risk Transfer Approach, Disaster Relief/Compensation, Disaster Response Fund at Centre and State Levels, Financial Aid and Donation Insurance-based Financial Recovery Approach.	15

Suggested Readings:

- Pal, Indrajit and Shaw, Rajib, (2023). Disaster Risk Governance in India and Cross Cutting Issues. Springer Publication
- Disaster Management in India. Ministry of Home Affairs, Government of India
- Disaster Management Act 2005
- Kamat, Shreedutt (2010). Disaster Financing: Concepts and Operationalisation. VDM, Verlag
- National Institute of Disaster Management Guideline
- Clarke, Daniel; Janvry Alain de; Sadoulet, Elisabeth and Skoufias, Emmanuel. (2015). Disaster Risk Financing and Insurance: Issues and Results
- Minimum Economic Recovery Standards. The SEEP Network
- Livestock Emergency Guidelines and Standards. (2009). Practical Action Publishing
- Handbook for Management of Animals in Disaster and Emergencies. (2022). Sphere India
- Various Guidelines of NIDM

Note: Latest edition of relevant reports/publications/text books may be used.

YEAR 1
SEMESTER I: PAPER- 3

Course Title	Research Methodology		
Course Code	PGDDM - 103	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Core Paper
Credit	Four (4)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
The course aims to provide a strong foundation in research methodology, concepts, methods, theoretical and conceptual framework. Learners will develop skill sets to design and conduct research using appropriate research methods.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Develop understanding about various kinds of research, methodology and design.			
➤ Develop research questions and objectives.			
➤ Understand the significance of doing research and proposal development.			
➤ Understand concepts of disaster theories.			
➤ Develop dissertation report.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Research Methodology		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Lecture -cum- Practical Hours
Unit- 1	Concepts of Research Methodology Research– characteristics, types and methods, Concept, Construct, Variable and types of variables (Dependent, Independent and Control), Development of hypothesis – significance and types of hypotheses, types of Error in hypothesis (Type I & Type II), testing of hypothesis.	15
Unit- 2	Development of Research Proposal and Ethical Consideration Research Area and Topic Selection, Formulation of Research Problem and Research Question, Conceptualization of Concepts, Survey of Literature and Review of Literature, Importance of Literature Review, Gap Identification from Literature, Citation (Intext), Objective and its Characteristics, Study Areas, Theoretical and Conceptual Framework, Inclusion and Exclusion criteria, Research Timeline. Ethical Issues of Research, Informed Consent, Privacy Concerns, Academic Integrity, Duplication and Plagiarism Prevention, Publication Ethics – Introduction and Importance, Conflict of Interest, Publication Misconduct; Plagiarism Software- Turnitin, Urkund etc.	15
Unit- 3	Research Design, Data Collection and Analysis and Thesis/ Dissertation Writing Research Design – Meaning, Type (Descriptive, Explanatory and Exploratory) and Element; Characteristics of Good Research Design, Phases of Research Design, Qualitative, Quantitative and Mixed Method Approach, Inductive and Deductive Research Strategy, Pilot Study; Sampling – Purpose and Principle of Sampling, Types of Sampling (Probability and Non-Probability Sampling), Universe, Population, Sample Size.	15

	Concept of Data – Qualitative and Quantitative Data, Primary and Secondary Data; Qualitative and Quantitative Tools and Method for Data Collection; Method, Tools and Techniques of Data Collection; Qualitative, Quantitative and Mixed Method, Tools (eg. SPSS, AtlasTi etc.) and Techniques of Data Analysis, Scaling and Measurement (Validity and Reliability). Thesis/Dissertation Writing; Element of Thesis/Dissertation, Manual of Style Citation; Reference and Bibliography, Indexing/citation database, Final Défense/ Viva-voce.	
Unit- 4	Humanitarian and Disaster Research and Disaster Theory Transdisciplinary Research (Quantitative, Qualitative, Mixed method approaches) – Narrative Research, Ethnography, Case Study etc. Disaster Model and Theories – Pressure and Release Models (PAR), Risk Society, Build Back Better, Risk Perception and Communication etc.	15

Suggested Readings:

- Bergin, Tiffany. (2018). An Introduction to Data Analysis: Quantitative, Qualitative and Mixed Method. Sage Publication Ltd.
- Bernard, Russell H. and Ryan, Gery W. (2010). Analysing Qualitative Data: Systematic Approaches. Sage Publication Ltd.
- Bryman, Alan & Cramer, Duncan. (2005). Quantitative Data Analysis with SPSS 12 and 13: A Guide for Social Scientists. Routledge Publication
- Bryman, Alan. (2008). Social Research Methods. Fourth Edition. Oxford University Press
- Comstock, Gary. (2013). Research Ethics: A philosophical Guide to the Responsible Conduct of Research. Cambridge University Press
- Denzin, Norman K. and Lincoln, Yvonna S. (2005). The SAGE Handbook of Qualitative Research. Third Edition. SAGE Publications

- Etkin, David (2016). Disaster Theory: An interdisciplinary Approaches to Concepts and Causes, Elsevier IGNOU Self Learning Material (MLIE-102 Research Methodology)
- Flick, Uwe. (2014). The SAGE Handbook of Qualitative Data Analysis. SAGE Publication
- Flick, Uwe. (2014). An Introduction to Qualitative Research, Fourth Edition. SAGE Publication
- Gaur, Ajai S. and Gaur, Sanjaya S. (2006). Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS
- Koepsell, David. (2017). Scientific Integrity and Research Ethics: An Approach from the Ethos of Science. Springer
- Ram Ahuja (2007). Research Methods. Rawat Publication
- Ritchie, Jane and Spencer Liz. (1994). Qualitative Data Analysis for Applied Policy Research. In Bryman A and Burgess (Eds), R.G. Analysing Qualitative Data. Routledge Publications. pp. 173-194
- Patton, Michael Quinn. (2002). Qualitative Research & Evaluation Methods. Sage Publications

Note: Latest edition of text books may be used.

YEAR 1

SEMESTER I: PAPER- 4

Course Title	Information Communication Technology and Remote Sensing		
Course Code	PGDDM - 104	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Skill Enhancement Paper
Credit	Four (4)	Course Type	Theory + Practical
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		

Course Overview

This course aims to provide the role of Information Communication Technology (ICT) and an understanding of the applications of remote sensing in disaster management and development. Learners will be equipped with knowledge and practical skills to use digital tools, geospatial technologies, database management systems and communication platforms. Learners will gain the ability to analyse and interpret information which will provide an understanding on early warning, emergency communication system and utilize satellite imagery and remote sensing tools.

Course Outcomes

After the successful completion of the course, students will able to:

- Understand the basic concepts of ICT.
- Understand the significance of ICT in disaster management and development.
- Utilize the ICT-based tools and technologies for disaster response and development.
- Understand and interpret satellite or aerial imagery to identify disaster-related features.
- Develop proficiency in using basic remote sensing tools
- Utilize the application of remote sensing techniques in disaster mitigation

Assessment Pattern

Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Information Communication Technology and Remote Sensing		
Course Curriculum		(Total Lecture hours- 90)
Unit No.	Content	Lecture -cum- Practical Hours
Unit- 1	Fundamental of ICT for Disaster Management Introduction of ICT- Definition, Meaning, Nature and Significance, Components and Strategies; National Disaster Communication Network; India Disaster Resource Network (IDRN), National Database for Emergency Management (NDEM), National Geophysical Research Institute, ISRO, Role of ICT in Disaster Risk Management.	15
Unit- 2	Emergency Communication System & ICT Resource/ Programme Early Warning System (EWS) – Tsunami Early Warning System (TEWS), weather Stations, UNOSAT, Indian National Centre for Ocean Information Services, National Disaster Alert Portal–SACHET, DAMIN etc. Forecast and warning – Indian meteorological Department, Tsunami Warning Centre, Central Water Commission etc. Emergency Communication System – Wired and Wireless Communication (GSM/ CDMA), Amateur Radio, Satellite Phones, Digital Radio. Public Awareness – Radio, Television, Cell Broadcasting, Telephone (Fixed and Mobile), Short Message Service (SMS), Emails/Internet, Sirens, Social Media. ICT Induced Risk Concept of ICT Induced Risks – Rumour, Fake News, Fake Alerts, Propaganda, Mis-Information, Miscommunication, Digital Arrest,	20

	Unauthorised Information and Scams; Electronic and Print Media, Social Media. Navigation - Introduction to GPS- History and Principles, Use of GPS- Surveying, operating principles, reading a GPS; Function of GPS- Space Segment, Ground Control Segment and User Segment; Working of GPS, GPS Accuracy and error Application of DGPS and Total Station, Google Map and Google Earth. Drone and AI Resources: UNISDR, USAID, Red Cross a& Red Crecent, CDRI, Geophysical Resources: Bhuwan, Bhoonidhi, EM-DAT, USGS, SOI Satellite Radar Systems: SAR, RISAT, Sentinel-1, RADARSAT Navigation Programs: GNSS, GPS, GLONASS, IRNSS, GAGAN, DGPS etc. ** Case Studies based of ICT resource and programs.	
Unit- 3	Introduction to Remote Sensing Remote Sensing – Definition and Principles of Remote Sensing; Components of Remote Sensis- Signal and Sensor; Types of Remote Sensing: Platform-based, Energy Source, Imagining Media EMR Spectrum, Bands; Image Characteristics; Orbit and Orbit Characteristics; Satellite and Sensors; Sensor Resolutions; Image Referencing System; Interaction – Scattering (Rayleigh, Mie and Non-Selective), Absorption, Reflection, Reflection; Digital Image, Pixel, Digital Number, Image format – BIP, BIL, BQS etc.; Image Histogram. Visual Image Interpretation & Digital Image Processing (Pre-Processing, Image Enhancement, Transformation, Classification; Interpolation: TIN, DTM and DEM, Characteristics of DEM and TIN.	15
Unit- 4	Application of ICT& Remote Sensing [Familiarization with Image Processing Software and Open-Source Intelligence (OSINT)].	40

	Georeferencing of Data (Toposheet, Image to Maps, Image to Image), Layer Stacking, Created FCC and TCC Images, Creating AOI and Subset, Mosaic, Pre-processing, Correction Techniques – Geometric, Atmospheric and Radiometric Corrections, Noise Removal; Image enhancement – Radiometric Enhancement, Spatial Enhancement, Spectral Enhancement; Image Classification – Supervise and Unsupervised Classification, Accuracy Assessment, Change Detection Analysis, Demonstration on GPS, Collection of Waypoints through GPS or DGPS, Downloading Handheld GPS Data into Software. Transformation of GPS Data to the GIS Software, Construction of Maps through GPS. Disaster Planning, Land Use and Land Cover (LULC), Change Detection, Application on Agriculture, Urban Development, Geomorphology, Hydrology, Coastal Management, Mapping, Geology and Forestry, Disaster Response Planning.	
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Suggested Readings:

- Bhatta, Basudeb. (2013). Remote Sensing and GIS- 2nd Edition. Oxford University Press
- Burrough, Peter A. McDonnell, Rachael A. and Lloyd, Christopher D. (2015). Principles of Geographical Information Systems. Oxford University Press
- Campbell, J.B. (2002). Introduction to Remote Sensing. Taylor Publications
- Drury, S.A. (1987). Image Interpretation in Geology. Allen and Unwin
- Gibson, P.J. (2000). Digital Image Processing. Routledge Publication
- Gupta, R.P. (1990). Remote Sensing Geology. Springer Verlag
- Jensen, J.R. (2000). Remote Sensing of the Environment: An Earth Resource Perspective. Prentice Hall
- Joseph George. (2003). Fundamentals of Remote Sensing. Universities Press
- Lillesand, T.M. and Kieffer, R.M. (1987). Remote Sensing and Image Interpretation. John Wiley

- Maltiar, K.K. and Maltiar, S.R. (2019). Concept of Cartography Remote Sensing and GIS. Rajesh Publication
- Nag P. and Kudrat M. (1998). Digital Remote Sensing. Concept Publication
- Pandey Shivam and Tripathi, Shashikant. (2020). Basic concept of Remote Sensing. GPS and GIS. Sankalp Publication
- Pratt. W.K. (2004). Digital Image Processing. John Wiley
- Sabbins, F.F. (1985). Remote Sensing Principles and Interpretation. W.H. Freeman and Company
- Scholl, Hans Jochen; Holdeman, Eric E. and Boersma, F. Kees. (2023). Disaster Management and Information Technology: Professional response and Recovery Management in the Age of Disasters
- Skidmore A. (2002). Environmental Modelling with GIS and Remote Sensing. Taylor and Francis
- Talukdar, Swapan; Chatterjee, Ranit; Bera, Somnath; Prashar, Atish and Saw, Rajib (2025). Communication, Science, Technology and Innovation in Disaster Risk Management: Recent Trends and Approaches in South Asia (GIScience and Geo-environmental Modelling). Springer Publication

Note: Latest edition of text books may be used.

YEAR 1
SEMESTER I: PAPER- 5

Course Title	Traditional – Indigenous Knowledge and Disaster Risk Reduction		
Course Code	PGDDM- 105	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Value Addition Paper
Credit	Two (2)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to provide the traditional knowledge and indigenous practices of the community. It will develop an understanding on role of culturally rooted wisdom to enhance community-based disaster risk reduction (CBDRR) and disaster resilience. Learners will be equipped with the ability to understand the traditional coping mechanism, early warning practices and the significance of traditional resources.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Understand the significance of traditional and indigenous practices for DRR.			
➤ Integrate traditional knowledge/wisdom with modern developmental approach.			
➤ Develop community-based disaster DRR approach.			
➤ Enhance traditional knowledge based natural resource management.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Traditional – Indigenous Knowledge and Disaster Risk Reduction		
Course Curriculum		(Total Lecture hours- 30)
Unit No.	Content	Lecture Hours
Unit- 1	Traditional and Indigenous Knowledge Based Disasters Coping Strategies Concept of Traditional Knowledge and Indigenous Knowledge; Understanding of DRR from Traditional and Indigenous Knowledge System; Nature-based Early Warning Indicators; SWOT Analysis of Traditional and Indigenous Knowledge; Traditional and Indigenous Knowledge-based Natural Resource Management. Best Practices and Lesson Learned, Case Studies.	20
Unit- 2	Story Telling and DRR Concept of Story-Telling, Signification Stories; Story Framing and Story-Telling Skill; Integration of Stories with DRR Approach.	10

Suggested Readings:

- Panda, Gopal Krishna et. al. (2023). Indigenous Knowledge and Disaster Risk Reduction: Insight Towards Perception, Response, Adaptation and Sustainability. Springer Publication
- Shaw, Rajib. Indigenous Knowledge Disaster Risk Reduction: Policy Note. SEEDS India
- Wilson, Michael; Liguori, Antonia and Underwood-Lee, Emily. (2026). Storytelling Research Methods: Meaning Making and Interdisciplinary Knowledge across Borders. Routledge Publication

Note: Latest edition of text books may be used.

YEAR 1**SEMESTER I: PAPER- 6**

Course Title	Field Work		
Course Code	PGDDM- 106	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	First	Course Category	Fieldwork
Credit	Two (2)	Course Type	Practical
Max. Marks	100 = 100 (External Assessment)		
Course Overview			
This course aims to provide learners with practical field-based exposure in both rural and urban setting to understand the nature and dynamics of HRVC. Learners will gain skill to identify, assess and analyse the disaster risk. Learners will develop understanding in field survey, participatory research approaches which will enhance their ability to engage with the communities and community based DRR.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Understand the corelation among hazard, risk, vulnerability and capacity.			
➤ Conduct field survey and collect disaster related data.			
➤ Integrate various government initiative with respect to disaster risks.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	-
	Assignment	-
	Performance	-
	Attendance	-
End Semester	Presentation and Viva Voce	100

Field Work		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Lecture -cum- Practical Hours
Unit- 1	Rural Field Exposure – Seven Days in a Village Understanding the Local Culture & Practices, Livelihood Patterns, Natural Recourses, Assets, Connectivity, Risk, Mitigation and Preparedness Measures. Hazard, Risk, Vulnerability, Capacity (HRVC) Assessment of the Areas – Transect Walk, Hazard Mapping, Resource Mapping, Problem Tree, Chapatti Diagram, Seasonal Calendars, Hazard Timelines, Ongoing. Development Schemes and Programmes, Integration of HRVC & Governmental Program/Schemes. Community Engagement- Knowledge Sharing, Develop Understanding of CBDRR, Awareness Generation, Collection Historical Incidents, Traditional Stories Sharing.	30
Unit- 2	Urban Field Exposure Institutional visit and Practical exposure- Visit to Government/NGO (Red Cross/ Fire Service Department/ Health Service Department etc.), Visit to Hazard Prone Location and Other Infrastructures/Offices Related to Disaster Management. Hazard, Risk, Vulnerability, Capacity (HRVC) Assessment of the Areas –Transect Walk, Hazard Mapping, Resource Mapping, Problem Tree, Chapatti Diagram, Seasonal Calendars, Hazard Timelines, Ongoing Development Schemes and Programmes, Integration of HRVC & Governmental Program/Schemes. Community Engagement- Knowledge Sharing, Develop Understanding of CBDRR, Awareness Generation, Collection Historical Incidents, Traditional Stories Sharing.	30

	Review of Disaster Management Plan of Hospital, Municipal Corporation and other Departments.	
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NOTE: -

- Learners will have rural field exposure and they will be placed in villages for a week long to have grassroot experience.
- Learners will have urban field exposure (one visit per month).
- Learner will have to present their experience and observation.
- A report (rural/urban visit) has to be submitted as per suggestive format.
- It is MANDATORY for the learners to participate in DRR-CAA Club and be the team member of choice of their team.

Course Structure

Post Graduate Diploma in Disaster Management (PGDDM)
(1-Year Program)

CREDIT DISTRIBUTION IN FOUR SEMESTERS**(40 CREDITS IN TOTAL)****SEMESTER 2**

Summarized Credits for the PGDDM – Semester 2										
Course Code	Course	Full Mark	Mid Semester		End Semester		Teaching Scheme			Hour
			FM	PM	FM	PM	Credit	TH	PR	
PGDDM - 107	Health and Disaster	100	30	13	70	32	4	3	1	75
PGDDM -108	Supply Chain Management	100	30	13	70	32	4	4	0	60
PGDDM -109	Environmental Social Governance (ESG) and Climate Risk	100	30	13	70	32	2	2	0	30
PGDDM - 110	Geographical Information System in Disaster Management and Developmental Planning	100	30	13	70	32	4	2	2	90
PGDDM -111	Review of Policies and Plans	100	30	13	70	32	2	2	0	30
PGDDM - 112	Internship	100	-	-	100	40	2	0	2	60
PGDDM - 113	Term paper	100	-	-	100	40	2	0	2	60
TOTAL		700					20			405

Skill Enhancement Paper: PGDDM – 110, Value Addition Paper: PGDDM – 111

FM: Full Marks, PM: Pass Marks, TH: Theory, PR: Practical

YEAR 1
SEMESTER II: PAPER- 1

Course Title	Health and Disaster		
Course Code	PGDDM- 107	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Core Paper
Credit	Four (4)	Course Type	Theory + Practical
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
The course aims to provide understand on interrelationship between health and disaster. Learners will be equipped with knowledge of health preparedness and mental health. The course is designed to provide an understanding of health system infrastructure, prevention and mitigation measures, mass causality management and psychosocial support systems.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Understand the relationship between disasters and health issues.			
➤ Identify and analyze various types of health issues and its impact on community during disaster.			
➤ Understand the significance of physiological support system in public health.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Health and Disaster		
Course Curriculum		(Total Lecture hours- 75)
Unit No.	Content	Lecture -cum- Practical Hours
Unit- 1	Public Health Systems, Infrastructure and Surveillance Concept of Health – Physical, Mental and Social Wellbeing, Structure of Health Services; Hospital Preparedness, Healthcare Institution and Programmes (Local to Global) Case Studies and Planning Guidelines. Concept, Types and Components of Surveillance System, Indicator and Event-Based Surveillance, Common Problems of Surveillance, Integrated Surveillance Projects (IDSP), Early Warning, Alert and Response System (EWARS).	15
Unit- 2	Disaster induced Diseases Concept of Water, Sanitation and Hygiene (WASH), Communicable Diseases & Non-Communicable Diseases; Health Preparedness and Prevention of Risk, Mortality and Morbidity; Food Safety and Food Security During Disaster. Gender Health – Concept of Gender, Issues and Challenge of Gender Health; Determinants of Health; Environmental Health; Concept of One Health, Health Impact Assessment. (HIA). Case studies of Communicable Diseases and Non-communicable Diseases	15
Unit- 3	Disaster Epidemiology, Medicines and Forensics Concept of Epidemiology, Epidemiological Survey (CASPER Toolkit); Concept of Disaster Medicine; Occupational Health and Safety (OSH); Post Disaster Need Assessment (PDNA), Concept of Disaster Forensic Retrospective Disaster Forensic Analysis of victims (FORIN Method), and Mass Casualty Management.	

	Case studies on Forensic Investigation of Disaster Risks Drivers and Root Causes.	20
Unit- 4	Mental Health and Psychosocial Support Concept of Mental Health, Factors Affecting Mental Health; Mental Health Illness, Challenges of Mental Health. Psychological responses – Concept of Psychological Rehabilitation; Psychological First Aid (PFA) and Psychological Debriefing and its Importance; Trauma-Focused Cognitive Behavioural Therapy (CBT), Community Based Interventions, Trauma Counselling, Stress Management Techniques, Gamified Techniques. Case studies of Mental Health and Intervention in Disaster Management.	25

Suggested Readings:

- Bryce, Cyralene P. (2001). Stress Management in Disasters, PAHO
- CDRI. (2024). Towards Resilient Health Infrastructure
- GAR Special Report. 2024. Forensic Insights for Future Resilience: Learning from Past Disasters
- NIDM. (2019). Handbook: Post Disaster Needs Assessment India
- Masys, Anthony J. (2016). Disaster Forensic: Understanding Root Cause and Complex Causality. Springer
- NIDM. (2019). Handbook: Post Disaster Needs Assessment India
- Oliver-Smith Anthony, Alcantara-Ayala Irasema, Burton Ian and Lavell Allan. 2016 Forensic Investigation of Disasters (FORIN): A Conceptual Framework and Guide to Research. IRDA
- OSHA, Factories/Companies Act
- Sekar, K., C. Jayakumar and Jude Patrick. (2023). Psychosocial First Aid. NIMHANS-NDMA
- Sphere Association. (2018). The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response

- The Alliance. (2019). Minimum Standard for Child Protection in Humanitarian Action. Humanitarian Standards Partnerships
- WHO. (2019). Health Emergency and Disaster Risk Management Framework
- WHO, Health Impact Assessment (HIA) Methods: <https://www.who.int/tools/health-impact-assessments>
- Winter Alfred, Ammenwerth Elske, Haux Reinhold, Marschollek Michael, Steiner Bianca and Jahn Franziska. (2023). Health Information Systems: Technological and Management Perspectives, Springer

Note: Latest edition of relevant reports/publications/text books may be used.

YEAR 1
SEMESTER II: PAPER- 2

Course Title	Supply Chain Management		
Course Code	PGDDM- 108	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Core Paper
Credit	Four (4)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to provide understanding of supply chain management principles and their applications in humanitarian logistics. Learners will be equipped with knowledge and skills to identify, assess, measure, monitor and manage the efficient flow of resources, information and services in disaster response. Learners ‘ability will be enhanced to develop effective supply chain management process, address logistical challenges to achieve the objective of humanitarian logistics.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Understand the signification of supply chain management in humanitarian logistics.			
➤ Develop understanding about supply chain management.			
➤ Identify, assess, and integrate potential risk in local to global supply chain networks.			
➤ Develop skills for managing inventory and resource allocation.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Supply Chain Management		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Lecture Hours
Unit- 1	Supply Chain Management (SCM) Concept of Supply Chain Management, Components and Drivers of Supply Chain Performance, Supply Chain Network Design, Humanitarian Supply Chain vs Commercial Supply Chain, Role of Technologies in SCM – ERP, GIS, Tracking System, AI, RFID, Barcode. Issues and Challenges in SCM.	15
Unit- 2	Humanitarian Logistics Framework Concept of Humanitarian Logistics; Principles of Humanitarian Logistics; Issues and Challenges of Humanitarian Logistics; Inter-agency Communication and Coordination Mechanisms – Government, NGOs, and International Agencies; Reverse Logistics, Humanitarian Logistics in Disaster Response. Case studies on Humanitarian Logistics in Disaster.	15
Unit- 3	Disaster Logistics Planning and Operations Resource Mapping, Warehousing and Inventory Management, Procurement and its Challenges, Transportation and Distribution of Relief Materials, Last-mile Connectivity and Delivery Challenges, Technologies-based Logistic Planning and Operations, Medical Logistics Management, Armed Force in Logistic Planning and Operations.	15
Unit- 4	Disaster Resilient Supply Chain Management (RSCM) Concept of Resilient SCM, SWOT Analysis of RSCM, Overview of Green Logistics/Corridor, Public-Private Partnership in Humanitarian Logistics; Emerging Trend in SCM Digital Supply Chain, AI, Blockchain in Humanitarian Logistics, Indigenisation of Disaster Supply Chain for Humanitarian Assistance and Disaster Relief (HADR). Case studies and Best Practices.	15

Suggested Readings:

- Baisya, Rajat K. (2024). Supply Chain and Logistics Management: An Integrated Approach. Routledge Publication
- Dyckhoof, Harald; Lackes, Richard and Reese, Joachim. (2003). Supply Chain Management and Reverse Logistics
- Kovacs, Gyongyi and Spens, Karen M. (2011). Relief Supply Chain Management for Disasters: Humanitarian Aid and Emergency Logistics. IGI Global
- Waters, Donald. (2011). Supply Chain Risk Management: Vulnerability and Resilience in Logistics. Kogan Page Publishers

Note: Latest edition of text books may be used.

YEAR 1**SEMESTER II: PAPER- 3**

Course Title	Environmental Social Governance (ESG) and Climate Risk		
Course Code	PGDDM - 109	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Core
Credit	Two (2)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to develop concept of Environmental, Social and Governance (ESG) and climate risk. Learners will be equipped with knowledge to address environmental and social risk associated with climate change. Learners will be able to understand the significance of ESG framework used by investors and stakeholders to addresses environmental impact, social responsibility, and governance.			
Course Outcomes			
After the successful completion of the course, students will be able to:			
➤ Outline the relationship between ESG risk and climate risk.			
➤ Identify causes and effects of climate change.			
➤ Assess ESG parameters of companies and propose sustainable and responsible solution for the organizations.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Environmental Social Governance (ESG) and Climate Risk		
Course Curriculum		(Total Lecture hours- 30)
Unit No.	Content	Lecture Hours
Unit- 1	Climate Change and Associate Risks Concept of Climate Change, Cause and Effect of Climate Change Climate Change and its Trends, Greenhouse Gas (GHG) Emissions; Cascading Climate Risk, Climate Risk Management; Physical Risk and Transition Risk, Challenges of Transition Risk; Carbon Footprint, Decarbonization, Significance of Renewable Energy, Sustainable Development Goals (SDGs), Intergovernmental Panel on Climate Change (IPCC), Net Zero, GHG Accounting and Carbon Markets, Nature-based Solutions (NbS).	15
Unit- 2	Environmental Social Governance (ESG) Concept of ESG, Significance of ESG, Integration of ESG to Companies, Business and Corporate Social Responsibility (CSR), Stakeholder Engagement, Corporate Governance Mechanism and Ethical Practice, ESG Scorecards of Listed Companies; Security Exchange Board of India (SEBI) Guidelines to ESG Metrics, Reporting and Disclosure, Green and Sustainable Finance. Concept of Environment Impact Assessment (EIA), EIA Tools and Analysis, Concept of Social Impact Assessment (SIA), SIA Tools.	15

Suggested Readings:

- Ghosh, Amitav. (2016). The Great Derangement: Climate Change and the Unthinkable. Penguin Books
- Govt initiatives towards Net Zero.
- Kashwan, Prakash. (2022). Climate Justice in India. Cambridge University Press

- Kumar, Sanjay; Singh, Suraj Kumar; Kanga, Shruti; Meraj, Gowhar; Farooq, Majid and Nathawat, M.S. (2024). Disaster Management and Environmental Sustainability. Scrivener Publishing LLC.
- IPCC reports
- Ministry of Environment. Forest and Climate Change reports
- Ramesh, Mridula. (2018). The Climate Solution: India's Climate Change Crisis and What We Can Do About It. Hachette India
- Shiva, Vandana. (1988). Staying Alive: Women, Ecology and Development. South End Pr.

Note: Latest edition books may be used.

YEAR 1
SEMESTER II: PAPER- 4

Course Title	Geographical Information System in Disaster Management and Developmental Planning		
Course Code	PGDDM - 110	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Skill Enhancement Paper
Credit	Four (4)	Course Type	Theory + Practical
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		
Course Overview			
This course aims to introduces comprehensive understanding of the applications of geographical information system in disaster management. Learners will be equipped with knowledge and practical skills to collect, analyse and visualize spatial data for effective hazard mapping, risk assessment utilizing tools for spatial modelling and efficient emergency decision making. The course will enhance learners ‘ability to have a hands-on training with GIS software tools to produce the digital maps.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Develop proficiency in using basic GIS software.			
➤ Understand and use the GIS tools and spatial analysis technique for hazard assessment, risk mapping and emergency planning.			
➤ Promote the application of GIS in disaster response and planning.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Geographical Information System in Disaster Management		
Course Curriculum		(Total Lecture hours- 90)
Unit No.	Content	Lecture -cum- Practical Hours
Unit- 1	Introduction to Geographical Information System Introduction to GIS- Definition; History and Evolution of GIS, Components of GIS; Three View Information System, Map, Map Characteristics – Scale and Classification of Map, Mapping Process; Map Coordinates- Plane and Geographic Coordinated; Map Projection – Classification of Map Projection, Map Aspect; Georeferencing – Ellipsoid and Geoid Models, Geodatic and Vertical Datum; Relation between Coordinate System and Map Projection; Spatial Dimension – Spatial and Non-spatial Data, Vector and Raster Data; Spatial Objects – Point, Line Polygon; Types of Digitizing Errors, Topology, Non-Spatial or Attribute Data Exploration – Attribute Data Entry, Attribute measurement Scale; Spatial Data Analysis – Data Selection/Query/Retrieval, (Re)classification, Overlaying Operations, Region Transformation/Measurement, Neighbourhood Operations, Connectivity Operations.	15
Unit- 2	Spatial Database Design and Analysis Geodatabase Creation, Spatial Data Integration (Digitization), Point, Line, Polygon; Spatial Data Editing – Building Topology, Non-spatial Data Integration – Attribute Tables Creation and Join Data, Non-Spatial Data Editing – Add or Delete Column/Field in Attribute data, Search, Selection and Queries of Spatial and Non-Spatial data, Vector Data analysis – Extraction, Overlay, Proximity; Raster Data analysis –	15

	Arithmetic Functions, Relational Functions, Conditional Functions, Matrix Overlay, Overlay Weightage Analysis, Neighbourhood Operations – Interpolation Function, Connectivity and Network Analysis – Shortest Path Analysis, New Route analysis, New Closet Facility Analysis, Service Areas Analysis, Best Route, Origin-destination Cost Matrix; Map Design – Types of Maps and Cartographic Symbolisation Of Maps, Symbolization, Pattern and Shading Techniques Of Different Types of Maps, Map Production – Map Layout and Exporting Map in Different Formats.	
Unit- 3	Geospatial Analysis and Multi-Criteria Decision Making for Disaster Management Emergence of GIS Technology in Application Areas: Land Use and Land Cover Planning, Urban and Rural Area Development and Planning, Land Surveying, Smart City Planning, Medical Logistics, Watershed Management, Solid Waste Management, Disaster Management, Land Record Information System. Application in Agriculture, Water Recourse Management, Weather and Climate, Forestry and Engineering, Hazard Zonation mapping, Human Induced Hazard mapping, Disaster Response Planning. Introduction of a Framework for Planning and Decision Making, Principles and Components of Multiple-Criteria Decision Making (MCDM), Multiple-Criteria Evaluation Methods/Techniques, MCDM Techniques used in Geospatial Modelling and Data Analysis, Introduction to Analytic Hierarchy Process (AHP), Basic Principles of AHP, Effect Table, Pair Wise Comparison, Different Kinds of Methods in	30

	Pair Wise Comparison, Standardization, Consistency, Weightage, Performance Score.	
Unit- 4	Practical Application of Spatial Data Management [Familiarization with Virtual GIS: Q -GIS, ArcGIS, Google Earth, Web GIS, 4D GIS Software and Open-Source Intelligence (OSINT)]. Shapefile and Geodatabase Creation, Spatial Data Integration (Digitization), Point, Line, Polygon, Spatial Data Editing – Building Topology, Non-spatial Data Integration – Attribute Tables Creation and Join Data, Non-Spatial Data Editing – Add or Delete Column/Field in Attribute Data, Search, Selection and Queries of Spatial and Non-Spatial Data; Vector Data Analysis – Extraction, Overlay, Proximity; Raster Data analysis – Arithmetic Functions, Relational Functions, Conditional Functions, Matrix Overlay, Overlay Weightage Analysis, Spatial Multi-Criteria Decision Modelling for Site Selection (Using AHP); Neighbourhood Operations – Interpolation Function, Connectivity and Network Analysis – Shortest Path Analysis, New Route Analysis, New Closet Facility Analysis, Service Areas Analysis, Best Route, Origin-destination Cost Matrix, Map Design – Types of Maps and Cartographic Symbolisation of Maps, Symbolization, Pattern and Shading Techniques of Different Types of Maps, Map Production – Map Layout and Exporting Map in Different Formats.	30

Suggested Readings:

- Anji Reddy, M. (2004). Geoinformatics for Environmental Management. B.S. Publications
- Bhatta, Basudeb. (2013). Remote Sensing and GIS- 2nd Edition. Oxford University Press
- Chang, T. K. (2002). Geographic Information Systems. Tata McGrawHill
- ESRI Map Book: GIS the Language of Geography by ESRI-USA ESRI. (2004). Satellite Geodesy. Gunter Seeba
- Heywood, I. Cornelius, S. CrverSteve. (2003). An Introduction to Geographical Information Systems. Pearson Education
- Pandey Shivam and Tripathi, Shashikant. (2020). Basic concept of Remote Sensing, GPS and GIS. Sankalp Publication
- Ram Mohan Rao. (2002). Geographical Information Systems. Rawat Publication
- Tar Bernhardsen. Geographical Information Systems. John Wiley
- Wise S. (2002). GIS Basics. Taylor Publication

Note: Latest edition of text books may be used.

YEAR 1**SEMESTER II: PAPER- 5**

Course Title	Review of Policies and Plans		
Course Code	PGDDM- 111	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Value Addition Paper
Credit	Two (2)	Course Type	Theory
Max. Marks	100 = 30 (Internal Assessment) + 70 (External Assessment)		

Course Overview

This course aims to develop an understanding on significance of policies and plans related to the development sectors and disaster management. Learners will be equipped with the ability to critically review, analyse and assess the gap in the existing policies and plans at local, national and global levels. Learners will gain enhanced ‘capacity to assess the effectiveness, inclusiveness and sustainability of development and disaster-related policies, contribute to informed decision- making and improved policy design in professional contexts.

Course Outcomes

After the successful completion of the course, students will able to:

- Understanding the significance of policy and plans in disaster and development.
- Assess the gaps in policy and plans.
- Integrated the disaster risk into developmental policy and plan.

Assessment Pattern

Assessment	Description	Marks
Mid Semester	Written Examination	10
	Assignment	10
	Performance	5
	Attendance	5
End Semester	Written Components (Closed Book)	70

Review of Policies and Plans		
Course Curriculum		(Total Lecture hours- 30)
Unit No.	Content	Lecture Hours
Unit- 1	Understanding Policies and Plans in Disaster Management and Development perspectives. Significance of Policies and Plans, Overview of Policies and Plans Related to Disaster Management, Critical Review of Development Policies and Plans Through Lens of Disaster Management, Integration of Disaster Risk Reduction Approach into Development Planning. Relevant Case studies.	15
Unit- 2	Review and Analysis of Policies and Plans Corporate Social Responsibility (CSR) Policy, Environment Social and Governance (ESG) Policy, Business Continuity Plan (BCP), Policies and Annual Reports of Frontline Department such as Panchayati Raj Institutions (PRI), Urban Local Bodies (ULB), Disaster Management Department etc., Gap Assessment of Policy and Plan. Relevant Case studies of Local to Global Policies and Plans.	15

Suggested Readings:

- Paton, Douglas and Johnston, David. (2017) Disaster Resilience: An Integrated Approach. Charles C. Thomas Publication. Illinois
- UNDRR Publications and UNEP reports.
- Sendai Framework, IPCC, SDGs
- National Policy on Disaster Management (NPDM)
- National Disaster Management Plans
- State Disaster Management Plan
- NITI Aayog reports
- State Economic Survey Reports
- NDMA guidelines & publications.
- Govt. various initiatives.

Note: Latest edition of relevant reports/publications/ text books may be used.

YEAR 1**SEMESTER II: PAPER- 6**

Course Title	Internship- I		
Course Code	PGDDM- 112	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Internship
Credit	Two (2)	Course Type	Practical
Max. Marks	100 = 100 (External Assessment)		
Course Overview			
This course is designed to provide the first-hand field exposure, enables to gain practical experience and real-world insights. Learners will be professionally equipped with skills, knowledge and competencies to effectively function within the organization setting. The course will build expertise in the key areas such as disaster management, climate change, sustainable development and related interdisciplinary fields, and prepare the learners to address contemporary global challenges with confidence and professionalism.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Integrating academic knowledge with field practices			
➤ Develop communication and coordination skills along with critical thinking skills			
➤ Developing understanding of organizational culture, workplace etiquette, and accountability			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	-
	Assignment	-
	Performance	-
	Attendance	-
End Semester	Report writing, Presentation & Viva Voce	100

Internship- I		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Practical Hours
	Inhouse Attachment All the learners will be attached with any of the agencies/organisation/institutions for the period of 60 days. They are expected to work for the host organization under the guidance/supervision of an experienced professional and supervision of an assigned faculty of the department. During this period, learner will take up regular activities as per the given assignment/ given format. Learners are required to submit a report based on the activities performed by them during the internship along with the daily logbook and field diary. Learner will be evaluated by his/her supervisor in the organization during the internship period. A confidential performance appraisal report duly filled by supervisor and sent to the Head of the Department at Jharkhand Raksha Shakti University, directly. At the end of the semester, students will be evaluated based on the performance appraisal report, internship report, class presentation and viva-voce.	60

YEAR 1
SEMESTER II: PAPER- 7

Course Title	Term Paper		
Course Code	PGDDM - 113	Programme	Post Graduate Diploma Disaster Management (One Year)
Semester	Second	Course Category	Term Paper
Credit	Two (2)	Course Type	Practical
Max. Marks	100 = 100 (External Assessment)		
Course Overview			
This course introduces learners to the process of planning, researching and writing a well-structured academic research project. The learners will be able to investigate, analyse and provide insights into chosen research topic, contribute to a deeper understanding and solution within the field of research.			
Course Outcomes			
After the successful completion of the course, students will able to:			
➤ Design, develop, conduct and present original research.			
➤ Develop critical thinking, analytical skill and academic writing proficiency.			

Assessment Pattern		
Assessment	Description	Marks
Mid Semester	Written Examination	-
	Assignment	-
	Performance	-
	Attendance	-
End Semester	Report writing, Presentation & Viva Voce	100

Term Paper		
Course Curriculum		(Total Lecture hours- 60)
Unit No.	Content	Practical Hours
	Mini Research All the learners will have to carry out mini research. They are required to prepare a research paper under the guidance of a faculty member at the University and to be presented in the department. The learners are required to present their proposal on the selected topic for the term paper within 6 months (by the end of semester one) from the date of registration. The topic can be anything related to the core domain of disaster management which may serve to increase the knowledge and understanding of an event, concept or phenomenon. Guideline to prepare Term Paper: ➤ Selection of Topic in relevant field of disaster management ➤ Preparation of proposal (1500 words) ○ Introduction of Topic ○ Literature Review ○ Theoretical Framework ○ Objectives ○ Research Question/Hypothesis (if any) ○ Rational of the study ○ Research design ○ Universe/population of study ○ Data Source/ Unit of Analysis ○ Sampling method and size ○ Methods and tools of data collection ○ Plan of Analysis ○ Ethical Consideration ➤ Submission of Term Paper	60

	○ Written matter should not more than 30 typed pages ○ It should be supported with relevant data, tables, selected reference (if needed) ○ With proper reference list ○ Cover Page (First Page) ○ Front and back matter as per the department/university guidelines The learners are required to present their term paper by the end of semester two to complete the 2-credit course.	
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