

POST GRADUATE DIPLOMA (SAFETY MANAGEMENT- DISASTER) – PART ONE

Optional Early Certificate: - N/A

Syllabus:-

Sr. No.	Module Code	Name of Module	Credits	Total Marks
1	PDSD111	Professional Communication	5	100
2	PDSD112	GIS in Disaster Management	5	100
3	PDSD113	Introduction to Disaster Management	5	100
4	PDSD114	Disaster Preparedness and Response	5	100
5	PDSD115	Disaster Prevention and Control Planning	4	100

Module Name: PROFESSIONAL COMMUNICATION

- 1. Corresponding: (Official, Business and Personal):** One Letter from each category (Official, Business and Personal) may be set in the examination paper and the students be asked to write one of them.
- 2. Grammar:** A brief review of easy form of tenses. Conversion of direct narration into indirect form of narration and vice versa (Only simple sentences). Punctuation.
- 3. Essay:** Preferably on scientific topic from the given outlines. The paper setter may be instructed to give a choice of attempting one out of three topics. The question paper may provide the outlines. The essay will be of 250 to 300 words. The examiner may select three topics one from each of the following.
 - Science
 - Technology
 - General
- 4. Written Communication:** Report, Notices, Agenda Notes, Business Correspondence preparation of summery & prices.

Module Name: GIS IN DISASTER MANAGEMENT

Unit – I

Basics of GIS:

- i. Introduction, Definition, Nature, Development.
- ii. Components of GIS
- iii. Application of GIS in Disaster Management

Unit – II

Geo-informatics Perspectives in Disaster Management:

- i. Structure for Storing Disaster Data.
- ii. Spatial Analysis of Disaster.

Unit – III

Disaster Mitigation Mapping:

- i. Natural Hazard Analysis and Mapping
- ii. Man Made Hazards and Mapping

Unit – IV

Risk and Vulnerability Assessment:

- i. Warning and Evacuation
- ii. Consolidated Preparation for next Disaster

Module Name: INTRODUCTION TO DISASTER MANAGEMENT

Unit I: Introduction

1. Hazard, Risk, Vulnerability, Disaster
2. Meaning, Nature, Importance, Dimensions & Scope of Disaster Management
3. Disaster Management Cycle

Unit II: Natural Disasters

1. Natural Disasters- Meaning and nature of natural disasters, their types and effects
2. Hydrological Disasters - Flood, Flash flood, Drought, cloud burst
3. Geological Disasters- Earthquakes, Tsunamis, Landslides, Avalanches, Volcanic eruptions, Mudflow

Unit III: Types of Natural Disasters

1. Wind related- Cyclone, Storm, Storm surge, Tidal waves, Heat and cold Waves
2. Climatic Change
3. Global warming
4. Sea Level rise
5. Ozone Depletion

Unit IV: Man – Made Disasters

1. CBRN – Chemical disasters, biological disasters, radiological disasters, nuclear disasters
2. Fire – building fire, coal fire, forest fire, Oil fire

Unit V: Types of Man – Made Disasters

1. Accidents- road accidents, rail accidents, air accidents, sea accidents
2. Pollution - air pollution, water pollution
3. Deforestation, Industrial waste

Unit VI: Disaster Determinants

1. Factors affecting damage – types, social status, habitation pattern, physiology and climate
2. Factors affecting mitigation measures, prediction, preparation, communication, area and accessibility, population, physiology and climate

Module Name: DISASTER PREPAREDNESS AND RESPONSE

Unit I: Disaster Preparedness

1. Disaster Preparedness: concept and significance
2. Disaster Preparedness Measures
3. Institutional Mechanism for Disaster Preparedness
4. Disaster preparedness with special needs/ vulnerable groups
5. Disaster Preparedness: Policy and Programmes

Unit II: Disaster Preparedness Plan

1. Concept and Significance of Disaster Preparedness Plan
2. Disaster Preparedness Plan essentials
3. Community Based Disaster Preparedness plan

4. Prediction, Early Warnings and Safety Measures of Disaster

Unit III: Role of Different Organizations / Institutions

1. Role of Information, Education, Communication, and Training
2. Role of Government, International and NGO Bodies
3. Role of Information Technology (IT) in Disaster Preparedness
4. Role of Geographers on Disaster Management

Unit IV: Disaster Response

1. Essential Components of Disaster Response, Disaster Response Plan, Resource Management- Financial, Medical, equipment, communication, Human, transportation, Food and essential commodity (Identification, Procuring, Propositioning and deployment), Directing and controlling functions
2. Communication, Participation & activation of Emergency Preparedness Plan, Logistics Management, Emergency support functions, Need and damage assessment

Unit V: Coordination in Disaster Response

1. Disaster Response Plan - Communication, Participation, and Activation of Emergency Preparedness Plan
2. Search, Rescue, Evacuation and Logistic Management

Unit VI: Psychological Response and Management

1. Psychological Response and Management (Trauma, Stress, Rumor and Panic)
2. Relief and Recovery
3. Medical Health Response to Different Disasters

Module Name: DISASTER PREVENTION AND CONTROL PLANNING

Unit I

1. Common Health Problems: Common Health Problems in Disasters, Epidemic and Communicable Diseases in Disasters.
2. Health Care: Local Health Care Agencies - P.H.C., C.H.C., District Hospitals.
3. First Aid: Meaning and component, Broken Bones and Fractures, Sprains Immediate Required Actions.

Unit II

1. Team Work and Leadership: Component and Characteristics.
2. Coordination: Meaning, Component and Coordination with Multi Disciplinary

3. Agencies. Counselling: Meaning, Methods and Counselling with Victims, Education and Awareness, Pre disaster counselling and awareness.
4. Search & Rescue and Mock Drills: Methods and Techniques.

Unit III

1. Pre-disaster Planning: Central, State and District Level.
2. NDMA, SDMA & DDMA - Structure and Functions.
3. International Responses to Disaster: UNDP Projects, Role of the Armed Forces, UN Initiative.
4. Relief Commissioner: Roles and Responsibility.

Unit IV

1. Community Resource: Community Organization and Community Resource Mobilization.
2. Media: Role of Media and Information in Disaster Management.
3. Remote Sensing and GIS: Techniques, Post and During Disaster Application, Damage Assessment, Application in Flood, Earthquake and Landslide.

Books Recommended

1. Bakshi S., 2010, Community Livelihoods and Natural Resources Pearl Book, New Delhi.
2. Bhalla Ashok, 2008 Global Warming Causes, Effects and Prevention, Betterhood Panchkula.
3. Doniwal Hement Kumar, 2009, Urban Geography, Gnosis Publishers of Education Book, New Delhi.
4. Trivedi Priyaranjan , Singh Uttam Kumar, 2009, Jaiv Proudhyogiki avam Apda Prabandhan, Gyanda Prakashan, New Delhi.
5. Sharma Deepti, Kumar Mahendra, 2009, Paryavaran avam Samvikas, Arjun Publishing House, New Delhi.
6. Trivedi Priyaranjan , Singh Uttam Kumar, 2009, Yudhh Paryavaran avam Apda Prabandhan, Gyanda Prakashan, New Delhi.
8. Sharma Deepti, Kumar Mahendra, 2009, Paryavaran Jaiv Sanrakshan, Arjun Publishing House, New Delhi.