



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

M. Phil/Ph.D. Entrance Test Syllabus of Disaster Management w.e.f. 2018

Guidelines for the conduct of M. Phil & Integrated Ph.D Entrance Test-2018

- The Entrance Test paper shall have 100 MCQ's with 1 marks each.
- There shall be no negative marking.
- There shall be single Entrance Test paper with three parts as:

PART-I: 20 marks (20 MCQ's)

General Aptitude with emphasis on logical reasoning, graphical analysis, analytical and numerical ability, quantitative comparisons, puzzles etc.

PART- II: 30 marks (30 MCQ's)

Basic (conventional questions) based on core papers covering different aspects of the subject

PART- III: 50 marks (50 MCQ's)

Advanced (higher value questions) based on core papers covering different aspects of the subject



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

PART- II: (30 MCQ's)

30 marks

REMOTE SENSING, GIS AND GPS

1. Fundamentals of Remote Sensing
2. Electromagnetic Spectrum (EMS)
3. Energy Interactions with Earth Surface Features and Atmosphere
4. Image Interpretation
5. Digital Image Processing

DISASTER RESPONSE

1. Response Essential Components
2. Communication, Participation and Activation of Emergency Preparedness Plans
3. Search, Rescue, Evacuation and Logistic Management
4. Stakeholders Co-ordination in Disaster Response
5. Central, State, District and Local Administration
6. Armed Forces in Disaster Response

REHABILITATION, RECONSTRUCTION AND RECOVERY

1. Rehabilitation, Reconstruction and Recovery
2. Community Participation in RRR (Rehabilitation, Reconstruction and Recovery)
3. Priorities in Recovery
4. Rehabilitation: Physical and Social Infrastructure
5. Relocation and Reconstruction of Housing
6. Public Buildings, Roads, Bridges, Dams

DISASTER RISK AND VULNERABILITY ASSESSMENT

1. Concept of Disaster Risk and Vulnerability
2. Basic Methodology in Risk Assessment .Tools for Risk Assessment
3. Guidelines for Mainstreaming Disaster Risk Assessment in Development in India
4. Damage and Loss Assessment (DaLA).Post Disaster Needs Assessments (PDNA)
5. Risk Data and Information Collection
6. Design of Risk Management; Components and Areas of Action
7. Vulnerability Indicators and Assessment Methods

CRISIS MANAGEMENT AND INCIDENT RESPONSE SYSTEM

1. Crisis Management: Concept and Objectives
2. Impact of ICT on Crisis Management
3. Identifying Potential Crisis Situations
4. Crisis Operational Guidelines
5. Role of Social Media in Crisis Preparedness



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

DISASTER MANAGEMENT INITIATIVES & LEGAL PROVISIONS

1. Yokohama, Hyogo and Sendai Framework for Action on Disaster Risk Reduction
2. International Disaster Response Laws, Rules & Principles (IDRL).
3. International Health Regulations (2005).
4. Nuclear Accident Convention (1986).
5. Tampere Convention (1998).
6. Convention on Oil Pollution (1990).

REGIONAL HAZARD AND DISASTER MANAGEMENT SCENARIO

1. Historical Disaster Scenario of Jammu and Kashmir
2. Case Study/Examples from Recent Disasters - 2014 Flood, 2010 Leh Flash Flood, 2005 Earthquake, 2005 Watego Snow Blizzard
3. Seismic Sensitivity of Kashmir Himalaya
4. Weather and Climate Variability in Jammu and Kashmir
5. Hydrological and Drainage characteristics of Jammu and Kashmir

STATISTICAL TECHNIQUES AND RESEARCH METHODS IN DISASTER MGT.

1. Statistical Analysis in Disaster Management
2. Measures of Central Tendency and Dispersion, Skewness and Kurtosis
3. Quartile Deviation and Coefficient of Variation
4. Correlation: Types of Correlation
5. Karl Pearson's Coefficient of Correlation and Rank Correlation
6. Regression Analysis, Coefficient of Regression



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

PART- III: (50 MCQ's)

50 marks

INTRODUCTION TO NATURAL AND HUMAN INDUCED DISASTERS

1. Hazards and Disasters
2. Flood
3. Drought
4. Tropical Cyclone
5. Landslides and Snow Avalanches
6. Earthquakes
7. Volcanic Eruption
8. Tsunami
9. Chemical, Biological, Radiological and Nuclear Hazards
10. Air Pollution and Water Pollution,
11. Urban Fires, Forest Fires, Coal Seam and Oil Well Fires
12. Land and Water Recourses Degradation

REMOTE SENSING, GIS AND GPS

1. Remote Sensing Systems
2. Platforms – Spaceborne / Airborne
3. Sensors-Active/ Passive. Multispectral and Hyper-spectral Systems
4. Geographic Information System
5. Spatial and Non-spatial Data
6. Data Models- Raster and Vector, Processing and Analysis/Modelling
7. Global Positioning System (GPS)

DISASTER RESPONSE

1. Psycho-social Response and Rehabilitation
2. Rumour and Panic Management and Role of Media
3. Medical and Health Response to Different Disasters
4. Role of Information, Communication and Technology (ICT)
5. Relief Measures-Minimum Standards of Relief
6. Disaster Site Management and Law & Order Issues

REHABILITATION, RECONSTRUCTION AND RECOVERY

1. Capacity Building for Self-Help Construction
2. Social and Economic Rehabilitation
3. Capacity Building for Reconstruction under BBB (Build Back Better) Approach
4. Skill Enhancement for Livelihood Development
5. Training and Awareness Programs
6. Medical Aid Therapy and Counselling- Psycho-Social Issues



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

DISASTER RISK AND VULNERABILITY ASSESSMENT

1. Pressure and Release (PAR) Model
2. Spatio-temporal Dynamics of Vulnerability. Vulnerability of Shanty Settlements, Towns and Cities
3. Planning for Vulnerability Reduction. Development and Vulnerability
4. Interactive Areas for Vulnerability Reductions and Policy Making
5. Vulnerability Status of India Initiatives of Risk and Vulnerability Reduction in India

CRISIS MANAGEMENT AND INCIDENT RESPONSE SYSTEM

1. National and International Disaster Recovery Policies and Plannings
2. Economy and Essential Services Management in Emergencies
3. Media Management in Crisis
4. Emergency Management Teams
5. Incident Response System
6. Incident Resources and Resources Management
7. Preparing a Crisis Management Plan

DISASTER MANAGEMNET INITIATIVES & LEGAL PROVISIONS

1. The Water (Prevention and Control of Pollution) Act, 1974
2. National Building Code of India (2005).
3. National Disaster Management Act 2005 and National Disaster Management Plan 2016
4. The Jammu and Kashmir Natural Calamities Destroyed Areas Improvement Act, 1955
5. Jammu and Kashmir Water Resources (Regulation and Management Act 2010)
6. Jammu and Kashmir Forest Act, 1987

INSTITUTIONAL STRUCTURE FOR DISASTER MANAGEMENT

1. United Nations Development Programme (UNDP)
2. United Nations International Strategy for Disaster Risk Reduction (UNDP)
3. International Federation for Red Cross Societies (IFRC)
4. Global Facility for Disaster Risk Reduction (GFDRR)
5. World Health Organization(WHO)
6. Asian Disaster Reduction Centre (ADRC)
7. Asian Disaster Preparedness Centre (ADPC).
8. SAARC Disaster Management Centre
9. National Disaster Management Authority
10. National Institute of Disaster Management
11. NITI Ayog
12. National Civil Defence Organization and National Platform for Disaster Risk Reduction



University of Kashmir, Srinagar-6, J&K

NAAC Accredited Grade "A"

P.G. Department of Geography & Regional Development

(DST-FIST Sponsored and UGC-SAP Assisted Department)

REGIONAL HAZARD AND DISASTER MANAGEMENT SCENARIO

1. Hydrological and Drainage characteristics of Jammu and Kashmir
2. Geomorphic Configuration and Flood Inundation Scenario of Kashmir valley
3. Water resource availability; distribution pattern and recent variability
4. Land Use and Land Cover Change: Drivers and Effects
5. Social, economic, and demographic Construction of Risk: Regional Situation
6. Regional Disaster and Development Status
7. State Disaster Management Policy and Plan
8. SDRF and its Role in Disaster Management

STATISTICAL TECHNIQUES AND RESEARCH METHODS IN DISASTER MGT.

1. Statistical Analysis in Disaster Management
2. Linear Regression Equation, Least Square Method
3. Sampling and its Types
4. Surveying for Damage Assessment
5. The Research Process –Broad Area, Preliminary Data Collection, topic Selection
6. Theoretical Framework– Research Questions, Hypothesis Development, Elements of Research Design.