

DEPARTMENT OF GEOGRAPHY
JAMIA MILLIA ISLAMIA
SYLLABUS FOR ENTRANCE TEST

M.Sc. Disaster Management and Climate sustainability Studies

Interior of the Earth; Seismic Evidence; Geological Time Scale; Forces of the Earth's Crust & Earth Movements; Folds and Faults; Volcanoes and Earthquakes; Rocks; Major Landforms; Weathering and Mass Wasting; Types of Streams, Drainage Pattern, Evolution of Landscape : Fluvial, Glacial, Aeolian, Coastal, and Karst.

Elements of Weather and Climate; Composition and Structure of Atmosphere; Insolation and Heat Budget; Temperature; Pressure and Winds; Humidity; Condensation and Precipitation: Forms of Precipitation and Types of Rainfall, Air Masses and Fronts; Cyclones and Anti-cyclones; Koppen's Classification of Climates.

Surface Configuration of the Ocean Floor; Sub-marine Relief of Atlantic and Indian Oceans; Temperature and Salinity; Tides and Currents, sea level rise

World Patterns of Growth, Distribution and Density of Population; Determinants of Population Distribution; Human Migration: Past and Present; Population Problems of Developed and Developing Societies; Patterns of Urbanization in the World.

India: Structure Physiographic Divisions; Drainage System; Climate: Origin and Mechanism of Indian Monsoon; Seasons of India; Classification of Climate; Trend and Pattern of Population Growth and Distribution; Patterns of Urbanization in India; Population Problems and Policies.

Man-Environment Relationship; Environmental Crisis: Nature and Management of Deforestation, Desertification, Floods and Droughts, Soil Erosion and Land Degradation; Water Pollution; Conservation of Biodiversity; Global Warming; Population Explosion, Food Security and Sustainable Development.

Definition and Classification of maps; Map Projections, Methods of Relief Representation Contours and their Profiles; Determination of Slope and Gradient; Topographic Sheets, Isotherms, Isobars and Isohyets; Climographs and Hythergraphs. Statistical Methods: Measures of Central Tendency –Measures of Dispersion, Co-efficient of variation, Measures of association, Regression. Qualitative and Quantitative areal distribution maps, Remote sensing: History, development and Types, Concept of

EMR, GIS: Definition, history and development, sources of spatial and non spatial data, GPS: definition, types and segments.

Disaster management; approaches and models; Typology and classification of Disaster , Disaster management cycle; key concepts, Vulnerability analysis; Risk analysis; Disaster risk reduction (DRR); Disaster management ethics disasters International approaches to cope up climate change: conventions (UNFCCC), Agreements (The Paris Agreement-2005), Protocols (Kyoto protocol etc). United Nations Office for Disaster Risk Reduction (UNDRR Climate change mitigation in developing countries; Public and Private sector role in climate change in India. Hyogo Framework of action, Environmental protection Act 1989, Coastal Zone Regulation Notification, 1991 , Disaster Management Act, 2005, Present Structure for Disaster Management in India, Crisis Management Plan (CMP) and Standard Operating Procedures(SOPs), Post Disaster need Assessment(PDNA), Functions and structure of National Institute of Disaster Management(NIDM), International Agencies in Disaster Management, Sendai Framework, Important natural , and manmade disasters.