Syllabus for Written Examination for PGT (Geography)

**Topic I: Geography as a discipline-**

Geographical ideas in ancient, medieval & modern periods: the contributions of Varenius, Kant, Reine, Humboldt and Ritter. Influence of Richthofen and Darwin. Videl-da-la Blache, F. Ratzel etc.

Contemporary geography: Post Second World War, Environmentalism, Areal Differentiation, spatial organization, Behavioural and perceptual Geography.

Positivism in Geography. Humanistic Geography. Marxist Geography and critical social theory. Development in Indian Geography.

**Topic-2 Origin and Evolution of the Earth-**

Introduction to the solar system.

Motions of Earth: Rotation, Revolution, Occurrence of Day and Night; change of seasons;

Latitudes and Longitudes; Finding time.

Earth’s Interior: Origin of contents and ocean basis Wagener’s Continental drift theory, Theory of Plate Tectonics Earthquakes and Volcanoes, Folding and faulting

Origin of the Earth: Nebular hypothesis (old Theory) and Big-Bang Theory. Evolution of continents, atmosphere and oceans.

**Topic-3 Interior of the Earth and Distribution of oceans and continents-**

Constitution of Earth’s interior (based on Seismic Evidences), origin of the continents and ocean basins. Wegner’s theory of Continental drift and Plate Tectonics. Plate movements and interactions-Volcanism and seismicity.

**Topic-4 Landforms-**


**Topic-5 Climate:**

Atmosphere: Composition and structure. Insolation and temperature, Atmospheric pressure and winds, Atmospheric moisture, cyclones, classification of climate (Koeppen and Thornthwaite Schemes classification). Global climatic changes: Causes and effects.

**Topic-6 Water (Ocean)**


**Topic -7 Life on the Earth**

Approaches in environmental Geography, landscape, ecosystem and perception approaches, Man and the Biosphere: Interactive and dynamic relationship. Human impact on biogeochemical cycles.

**Topic-8 India:**

Geographical basis of Indian State-territory; location, extent, shape and size.

**Topic-9 Physiography:**

Structure, Physiographic divisions, Drainage system and its evolution.

**Topic-10 Climate, Vegetation and Soil:**

Climate: factors controlling climate of India

Origin and mechanism of Indian monsoon; Seasons of India, Classification of climate of India (Koeppen’s, Thornthwaite, Triwartha).

Soils: Type and distribution (I.C.A.R.), Soil problems, conservation of soil

Vegetation- Types & Distribution; conservation

Wild Life- its conservation.

**Topic-11 Natural Hazards and disasters-**

Causes, Consequences and management in India Environmental Hazards: Floods, droughts, cyclones, earthquakes and landslides; human adjustment to hazards; hazards perception and mitigation; environmental institutions and legislation in India.

**Topic-12 Human Geography: Nature and Scope**
Nature and scope of Human Geography, Approaches to the Human Geography, Determinism, Environmental Determinism, Possibilism, Neo-determinism, ecological and Behaviouralism.

**Topic -13 People (World and India)**

Trends and patterns of population growth: determinants and patterns of population distribution; theories, demographic transition; Human migration, Patterns of human development.

**Topic-14 Human Activities: (World and India)**

*Primary:* - Hunting, gathering, Herding (Nomadic & Commercial) Lumbering fishing, mining and agriculture; Agricultural practices; some major crops.

*Secondary:* - Industries: Classification, Theories of localization, major Industries, recent trends in industries, world comparisons.

*Tertiary:* - (Services)

*Quaternary-Quinary activities*
Planning in India: target area planning, idea of sustainable development

**Topic-15 Transport, Communication and Trade(World and India)**

Transport and communication Roads, railways, waterways and airways; oil and gas pipelines, national electric grids. Communication networking-radio, television, satellite and Internet.

International Trade-Basis and components, trade balance, major trading organizations, changing pattern of India’s foreign trade, sea-routes, inland water-ways, sea ports and their hinter-land.

**Topic-16 Human settlements (World and India)**


**Topic -17 Geographical perspective on selected issues and problems**

Environmental pollution-Land, Water, Air, Noise, Global Warning, Poverty, Food Security; Sustainable Development.

**Topic -18 General Cartography (Practicals)**


Spatial Information technology: GIS, GPS, Computers-Software and Hardware components, Data format, Raster and Vector, editing and topology etc.

Spatial Analysis; Overlay, Buffer and Proximity analysis.