SYLLABUS FOR THE POST OF PGT (GEOGRAPHY) IN DOE & NDMC

1. Geographical ideas in ancient, Medieval & Modern Periods – Contributions of Varenius, Kant, Reine, Humboldt & Ritter.
2. Origin & Evolution of Earth.
3. Interior of the Earth & Distribution of Oceans and Continents.
4. Land Forms.
5. Climate.
6. Water (Ocean).
7. Life on the Earth.
8. Indian Geography.
9. Physiographic.
10. Climate, Vegetation & Soils.
11. Natural Hazard & Disasters.
12. People (World & India).
13. Human Activities (World & India) – Primary, Secondary, Tertiary, Quaternary.
14. Transport, Communication & Trade (World & India).
15. Human Settlements.
16. Geographical Perspective on Selective Issues & Problems – Environmental Pollution – Land, Water, Air, Noise, Global Warming, Poverty, Food Securities, Sustainable Development.
17. General Cartography.
18. Geomorphology.
19. Human Geography.
20. Demography & Population Studies.
21. Hydrology & Soil Studies.
22. Evolution of Geographical Thought.
23. Agriculture.
24. Geography of Health.
25. Political Geography.
26. Biogeography & Biodiversity.
27. Geography of Social Wellbeing.
28. Remote Sensing & GIS.
29. Heritage Conservation
30. Maps.
31. Vulnerability and Disaster
32. Geography of Himalayas.

Syllabus for for PGT (Geography)

Topic 1: 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. Vidal-la-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-

Mineral and rocks- classification of rocks, rock cycle. Important minerals geomorphic process of denudation Endogenic and Exogenic processes. Mass Wasting, Landslide. Work of River, Glacier Wind, Sea Waves etc, processes of soil formation.

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)

Geomorphology of the ocean floor, submarine relief features of Atlantic, Pacific and Indian Ocean. Movement of ocean water: Currents, tides and waves. Marine deposits and coral reefs.

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)

Unstable and stable settlements, rural settlements: origin, types and patterns; Urban settlements: Origin and growth of towns; functional classification of towns. Problems of urbanization in the world; urbanization in India; Urban slums and squatters. Morphology of cities; distribution of Mega-cities, problems of human settlements in Developing countries.

Topic -17 Geographical perspective on selected issues and problems

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

Topic -18 General Cartography (Practicals)

Elements and classification of maps, scales, map-projections, finding directions, latitudes, longitudes and calculation of local & standard time, Identification & Analysis of relief forms: Topographical Maps and interpretation. Weather-instruments and interpretation of weather maps. Digital mapping, Remote sensing, Visual interpretation. Processing of Data, Thematic mapping, representing statistical data by various diagrams-Bar, Histogram, Pie etc.
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.

- Geomorphology
- Climatology
- Regional Development
- Urban Geography
- Cultural Geography
- Geography of India
- Remote Sensing and GIS
- Biogeography
- Social Geography
- Hydrology
- Geographical Thought
- Water Resource and Management
- Population Geography
- Agricultural Geography

Topics of syllabus-Teaching Education and Methodology:-

1. Learning & Teaching
2. Language across the curriculum
3. Understanding discipline and subject
4. Gender school and Society
5. Pedagogy of a school subject
6. Knowledge and curriculum
7. Assessment for learning.
8. Creating an inclusive school
9. Childhood and growing up
10. Drama and Art in Education