

Syllabus for Uchcha Madhyamic Paper II STET 2023

UNIT I Subject

Geography 100 Marks

Unit-1 : Physical Geography

- Origin of solar system: Theories of Kant and Laplace, Jeans & Jeffrey's & Big Bang theory
- Internal Structure of the Earth
- Isostasy : Pratt's and Airy's views
- Earthquake and Vulcanism
- Kober's and Holme's Theories of mountain building
- Wegener's theory of Continental Drift
- Plate Tectonics
- Folded Topography
- Faulted Topography
- Normal Cycle of Erosion
- Arid Topography
- Glacial Topography
- Karst Topography
- **Climatology and Oceanography:**
- Composition and Structure of Atmosphere
- Classification of Air masses
- Fronts
- Cyclones
- Koppen's and Thornthwaits's Scheme of classification of climate
- Climatic changes – causes and evidences
- Salinity of Ocean water
- Relief of Ocean Floor: Continental shelf, Slope and Deep Sea plain
- Relief of the Indian and Atlantic Ocean
- Ocean currents
- Tides

Unit-2 : Resource and Economic Geography

- Meaning, Concept and Classification of resources
- Soil, water and forest resources- their distribution, Utilization and Conservation
- Fisheries of the World
- Distribution and Production of the following resources:
 - Coal in USA and China
 - Petroleum in Middle East
 - Iron ore in Russia and Australia

- Manganese in Russia and USA
- **Agriculture:**
 - Subsistence farming
 - Commercial grain farming
 - Plantation Agriculture
 - Dairy Farming
 - Mediterranean Agriculture
- **Industries:**
 - Industrial Location Theory of Weber
 - Agricultural Location Theory of Von Thunen
 - Iron and Steel industry
 - Cotton Textile industry
 - Sugar Industry
- **Transport and Trade:**
 - International trade with reference to WTO
 - Globalisation and its impact on economy
 - Trade routes-Suez and Panama canals

Unit-3 : Human Geography

- Meaning, Definition and Scope of Human Geography
- Evolution of man
- Cultural realms of the world
- Human activities in Mountain environment, Monsoon Lands, Equatorial regions, Temperate Grasslands
- Growth and distribution of population
- Theories of Demographic Transition, Optimum Population
- Distribution, habitat and economy, mode of life and socio-cultural organisation of the following tribes – Eskimo, Bushmen, Santhal, Oraon
- Urbanisation and related problems
- Growth Pole Theory
- Christaller's Central Place Theory
- Migration – Internal and International

Unit-4 : Geographical Thought

- Meaning, and Definition of Geography
- Its relationship with other sciences
- Contribution of Ancient Geographers: Eratosthenes, Ptolemy
- Contributions made by Humboldt, Ritter, Ratzel, Vidal de la Blache and Mackinder in the field of Geography

- Dualism in Geography: Determinism Vs. Possibilism and Neo-determinism, Physical Vs. Human Geography, Systematic Vs. Regional Geography
- Quantitative Revolution in Geography
- Humanistic Geography, Gender Geography

Unit-5 : Environmental Geography

- Meaning, Concept, and scope of Environmental Geography
- Factors affecting environment
- Ecology and Ecosystems
- Major Eco systems of the world
- Ecological balance and imbalance
- Nature, scope and significance of Biogeography
- Bio-energy cycles
- Concept of Zoogeography
- Biodiversity and Hotspots
- Natural Disaster : Drought, Flood and Earthquakes – Causes, effects and Mitigation
- Rain water harvesting
- Watershed Management
- Sustainable Development
- Eco-Tourism

Unit-6 : Remote Sensing & GIS

- Meaning and Scope of Remote Sensing
- History of Remote Sensing
- Process and stages of Remote Sensing
- Properties of electromagnetic energy – wave length, frequency and velocity
- Difference between air photography and image
- Electro magnetic spectrum
- Interaction of electromagnetic energy in the atmosphere
- Interaction of electromagnetic energy with earth surface features
- Meaning, concept and objectives of GIS

Unit-7 : Population Geography

- Meaning and scope of population Geography
- Science of Demography
- Recent trend of Population growth with special reference to developed and developing countries

- Methods of population projections
- Fertility measures and determinants
- Mortality measures and determinants
- Internal and international migrations
- Malthusian Theory of population
- Growth patterns of world population
- Distribution of world population
- Problems caused by differential population pressure
- Population policies of Russia and China

Unit-8 : Geography of Asia

- Structure
- Physiography
- Drainage
- Climate
- Natural Vegetation
- Characteristics of Agriculture
- Mineral resources – Iron ore, Manganese, Tin and Bauxite
- Power resources – Coal, Petroleum and Hydel Power
- Population and its Problems
- **China:**
 - Physiography
 - Climate and Agricultural regions
 - Industrial Development
 - Industries – Iron and Steel, Cotton Textile
 - Population : Growth, Distribution and Density
- **Japan:**
 - Physiography
 - Fisheries
 - Industries-Iron & Steel and Automobile
 - Population : Growth, Distribution and Density

Unit-9 : Geography of India and Bihar

- Structure
- Physiography
- Drainage system – Himalayan and Peninsular
- Origin and Characteristics of Indian Monsoon
- Natural Vegetation
- Soil – types, erosion & conservation
- Characteristics of Agriculture

- Major Crops – Rice, Wheat, Sugarcane, Cotton
- Importance and means of irrigation
- Mineral Resources – Iron ore, Manganese, Mica
- Power Resources – Coal, Petroleum and Hydel Power
- Selected industries – Iron and steel, Cotton textile and Sugar
- Growth, Distribution and Density of Population
- Population composition in India: Occupational structure, Literacy, Age and Sex, Major religions, Languages
- Population Problems and policies
- Types and Patterns of rural settlements
- Urbanisation in India
- Problems of urbanisation
- Rural – urban Migration
- **Geography of Bihar:**
 - Structure & Physiography
 - Agricultural Crops : Rice, Wheat, Maize, Pulses
 - Agricultural regions
 - River Valley Projects : Gandak, Kosi, Son
 - Flood and Drought Problems
 - Population: Growth, Distribution and Density

Unit-10 : Cartographic and Statistical Techniques:

- Latitude, Longitude, Measurement of Time, Scale and its types, Map Projection – Cylindrical, Conical & Zenithal
- Topographical Maps of India, Cartograms, Rocks and Minerals, Surveying by Plane Table, Prismatic Compass and Levelling Instruments
- Mean, Median, Mode, Quartile Deviation and Standard Deviation

Syllabus for Art of Teaching and Other Skills STET 2023

Unit II Art of Teaching, Other skills	Marks 50
(A) Art of Teaching	Marks 30
(B) Other skills	Marks 20

A. Art of Teaching

1. Teaching & Learning:- Meaning, Process & Characteristics.
2. Teaching Objectives and Instructional objectives: Meaning & Types, Blooms Taxonomy.
3. Teaching Methods: - Types and its Characteristics, Merit, and demerits of Methods.
4. Lesson Plan: - Types and Format & Various Model.
5. Microteaching & Instructional analysis.
6. Effective ecosystem of Classroom.
7. Textbook and library

8. Qualities of Teacher.
9. Evaluation & Assessment for learning.
10. Curriculum.
11. Factors affecting teaching and learning.
12. Teaching Aids and Hands on learning.

B. Other skills

1. General Knowledge,
- 2.Environmental Science
3. Mathematical aptitude,
- 4.logical Reasoning