

# 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**

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

**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