

**SYLLABUS FOR COMPUTER BASED RECRUITMENT TEST (CBRT)**  
**FOR THE POST OF ASSISTANT PROFESSORS IN GOVERNMENT COLLEGE**  
**(Geography)**  
**UNDER**  
**DIRECTORATE OF HIGHER EDUCATION**  
**(Advt No. 12 Year 2024)**

**I. General English including Grammar - 05 marks**

**II. General Knowledge, Current Affairs and Events of National and International Importance - 10 marks**

**III. Logical Reasoning and Analytical Ability - 10 marks**

**IV. Core: - 50 marks**

**Unit 1: Geomorphology**

- Meaning, scope and fundamental concepts
- Earth movements: Epeirogenesis, orogenesis, isostasy, plate tectonics
- Geomorphic processes: Fluvial, arid, glacial, periglacial
- Erosion surfaces, polycyclic and climatic geomorphology
- Models of landscape evolution: Classical (Davis, Penck, King) & contemporary
- Applied geomorphology: Infrastructure planning, hazard mitigation

**Unit 2: Climatology**

- Definition, scope, and significance
- Heat balance of the Earth, atmospheric circulation, air masses and fronts
- Indian monsoon: Recent concepts
- Climatic classifications: Koppen, Thornthwaite, Trewartha – critical review
- Applied climatology: Climate and agriculture, settlements, vegetation
- Urban climatology, microclimate, heat islands, climate forecasting

**Unit 3: Oceanography**

- Definition, scope, and evolution
- Ocean floor morphology with special reference to Indian Ocean
- Ocean water: Temperature, salinity, currents
- Ocean-atmosphere interaction: El Niño, La Niña, global circulation
- Marine resources: Biotic, mineral, energy, food
- Marine pollution, ocean conservation, geopolitics of oceans

**Unit 4: Environmental Geography & Climate Change**

- Biosphere: Structure, function, and global biomes
- Human-environment interaction across ages: Pleistocene to Anthropocene
- Environmental degradation and biodiversity loss
- Climate change: Causes, consequences, mitigation, and adaptation
- Sustainability: Resource conservation, ecosystem resilience
- Environmental policies and international climate frameworks (e.g., IPCC, Paris Agreement)

**Unit 5: Disaster Management and Risk Assessment**

- Hazards and disasters: Natural and anthropogenic
- Types of disasters: Floods, droughts, earthquakes, landslides, cyclones
- Disaster risk reduction: Mitigation, preparedness, recovery
- Role of geospatial technology in hazard mapping and early warning
- Case studies from India: Himalayan landslides, coastal cyclones

**Unit 6: Geography of Resources**

- Concept, classification, and characteristics of resources
- Resource adequacy, scarcity, and sustainable management
- Global and Indian resource regions: Forests, water, minerals, energy
- National resource policies: Forest and water policy, resource governance
- Challenges: Overuse, population pressure, technological solutions

**Unit 7: Agricultural Geography**

- Definition, scope, and approaches
- Agricultural systems, land use classification, crop combination (Weber, Doi)
- Agricultural regions of India and the world
- Green Revolution, agricultural productivity and efficiency
- Sustainable agriculture, food security in India, agro-environmental issues

**Unit 8: Industrial Geography**

- Industrial location theories and factors
- Classification and linkages in industries
- Global industrial regions: USA, Japan, UK, Western Europe
- Industrial development in India: Regions, complexes, policies
- Globalization, industrialization, and environmental impacts
- Tourism geography: Elements and development (with reference to Goa)

**Unit 9: Geography of India**

- Population growth, distribution, and demographic issues
- Agriculture: Irrigation, fertilizer use, agrarian regions
- Industry: Location trends, industrial corridors
- Transport, trade, and communication networks
- Regional disparities and development planning in India
- Impact of liberalization, privatization, and globalization (LPG reforms)

**Unit 10: Geoinformatics and Spatial Technology**

- Fundamentals and scope of geoinformatics in geography
- Tools and techniques:
  - Remote Sensing, GIS, GPS
  - Digital image processing, photogrammetry
- Satellite meteorology and climate monitoring
- Urban and regional planning applications
- Environmental modeling and decision-making
- Role in disaster management, agriculture, resource mapping

**Note:**

**Duration for C.B.R.T : 90 Minutes**

**Maximum Marks for C.B.R.T : 75 Marks**