

Department of Geography, University of Allahabad

Revised Syllabus for MA / M.Sc. Semester III for Session 2020-21 Paper V: Practical

- Unit I** **Cartography:**
20 Marks Earth and its Coordinate System: Mathematical construction and characteristics of Sinusoidal, Gall's, Mercator's Projections. Map Reference System
- Unit II** **Spatial Statistical Techniques:**
20 Marks Analysis of Spatial Data: Scatter diagram, correlation by Spearman's Rank Difference and Karl Pearson's Product Moment Methods.
- Unit III** **Digital Satellite Image & Digital Data Analysis**
20 Marks Digital Image Rectification: Definition, Types of Errors in Satellite Images: Scan line dropouts, Scan line banding, Scan line offsets, Atmospheric Corrections, Geometric Corrections Systematic and Non-systematic. Digital Image Enhancement: Spatial Digital Data Filtering: Concepts of use of Filters, Types of filters and their uses.
- Surveying:** **Surveying by Indian Clinometer & Plain Table**
20 Marks (Traversing contours by Indian Clinometer)
- Viva-Voce** **Based on Field Work**
10 Marks
- Record File** **Lab Work Based**
10 Marks

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Revised Syllabus for MA / M.Sc. Semester III for Session 2020-21 Paper IV: Africa

- Unit-I** Physiographic Regions; Drainage Network; Climate, Soil and Vegetation
- Unit-II** Agricultural, Mineral, Energy, and Industrial Complexes.
- Unit-III** Demographic Growth and Migration, Ethnic Composition: Language, Religion and Culture
- Unit-IV** Geographical study of Egypt and Republic of South Africa.

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Revised Syllabus for MA / M.Sc. Semester III for Session 2020-21 Paper III: Industrial Geography

- Unit-I** Nature, Scope and Recent Developments in Industrial Geography; Factors of Industrial Location; Centralization and Decentralization of Industries.
- Unit-II** Theories and models of industrial location: Weber and Losch, Major Industrial Regions of the World.
- Unit-III** Historical review of Indian Industrialisation since 1947; Evolution of Industrial Regions in India; Development of Small Scale and Cottage Industries; Industrial Policy of India.
- Unit-IV** Problems of Industrial Development; Industrial Development and Environmental Degradation; Industries and Economic Development; Impact of Globalisation on Industrial Development.

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Revised Syllabus for MA / M.Sc. Semester III for Session 2020-21 Paper II: Agricultural Geography

- Unit-I** Meaning and scope of Agricultural Geography; Origin and dispersal of agriculture – major agricultural hearths; Diffusion of agricultural innovations.
- Unit-II Determinants of agriculture - physical, economic, political, technological, socio-cultural; Crop concentration, Cropping intensity, Diversification and specialization, Efficiency and productivity; Crop combination regions
- Unit-III Von Thunen's Model and its modification – Concept of agricultural region: Whittlesey's classification of agricultural regions; Agricultural typology Agro-climatic regions of India.
- Unit-IV New trends in Indian agriculture – Green revolution, white revolution; Food deficit and food surplus regions; Problems & Policies of Indian agriculture; Agriculture and Environmental Degradation

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Revised Syllabus for MA / M.Sc. Semester III for Session 2020-21 Paper I: Oceanography

- Unit-I** Definition and scope of Oceanography; Distributional patterns of land and oceans; Plate tectonics and origin of oceans; Depth zones and Hypsometric Curve; Bottom relief of oceans
- Unit-II** Temperature of Sea-water; Salinity of Sea-water; Sea-water Density; Tides: Origin, Types and Prediction; Oceanic Currents: Causes and Controlling factors.
- Unit-III** Oceans as Ecosystems; Zonation of the sea; Mangroves and Estuarine Ecology; Coral Reefs: importance and bleaching; Marine Pollution; Climate change and Marine Ecosystem.
- Unit-IV** Classification of oceanic resources; Mineral resources; Energy resources; Food resources; Aquaculture and sericulture, Management, and conservation of marine resources.