

Syllabus for Qualifying Entrance Examination

PG Direct Admissions in Masters in Planning with specialisation in Environmental Planning and Management / Urban and Regional Planning / Transport Planning

(Academic Year 2023-24)

SPA Vijayawada

General information:

- Question Paper shall be of 50 marks, Total Duration of time is 1 (ONE) Hour.
- There would be 40 objective type questions or MCQs of One Mark each, and 2 Descriptive Type Questions, carrying 5 marks each
- Questions shall be from any portions of the syllabus as below

Syllabus:

1: Planning Design and Applications

Computer Application in Planning; Organization of space; space standards; universal design; building byelaws; codes and standards; application of remote sensing and GIS in planning, methods of non-spatial and spatial data analysis, graphic presentation of spatial data; decision support system and land information system.

2: Planning Concepts, Process and Approaches

Salient concepts, theories and principles of urban planning, Eco-City, Smart city; Happy cities, Slow cities, Sustainable development, other concepts and theories; Ekistics; urban sociology; social, economic and environmental cost benefit analysis; development guidelines such as URDPFI, RADPFI, AMRUT, etc., tools and techniques of surveys – physical, topographical, land use and socio-economic surveys; local self-governance; land acquisition act.

3: Basics of Urban and Regional Planning

Historical and modern examples of urban design; elements of urban built environment –concepts and theories of urban design; principles; public spaces, development controls, FAR, densities and building byelaws; urban renewal and conservation; heritage conservation. Regional delineation; settlement hierarchy; types and hierarchy of plans; various schemes and programs of central government; transit oriented development, SEZ, etc.; demography and equity in planning; demographic transition model.

4: Transport, Infrastructure Planning and Project Management

Process and principles of transportation planning and traffic engineering; road capacity and travel demand forecasting; traffic survey methods; traffic and transport management; mass transportation planning; firefighting systems; building safety and security systems; building management systems; water treatment; water supply and distribution system; water harvesting systems; storm water drainage system; sewage disposal methods; methods of solid waste management. Project

management techniques e.g. PERT, CPM etc.; estimation and specification; professional practice and ethics. PPP models and project finance.

5: Housing and Environmental Planning

Housing typologies; concepts, principles and examples of neighbourhood; residential densities; affordable housing; real estate valuation; ARHCs, RAY and housing for all. National housing policies, programs and schemes; slums, squatters and informal housing; standards for housing and community facilities; housing for special areas and needs. Natural and man-made ecosystem; ecological principles; environmental considerations in planning and design; environmental pollution-types, causes; climate change and built environment; climate responsive design; EIA.

6: History and Contemporary Architecture

Principles of art and architecture; world history of architecture: Egyptian, Greco-Roman classical period, byzantine, gothic, renaissance, baroque-rococo, etc.; recent trends in contemporary architecture: art nouveau, art deco, eclecticism, international styles, post modernism, deconstruction in architecture, etc.; influence of modern art and design in architecture; Indian vernacular and traditional architecture.

7: Building Services and Sustainability

Solar architecture; thermal, visual and acoustic comfort in built environments; natural and mechanical ventilation in buildings; air-conditioning systems; sustainable building strategies; building performance simulation and evaluation; intelligent buildings; water supply; sewerage and drainage systems.

8: Fundamentals of Geography

Urban geography and econometrics, concept of geomorphic cycle; composition and structure of the atmosphere, Physical, Topographical land use and field surveys, forms and functions of ecosystem; conservation and management of ecosystems; growth and density of population; cultural geography: areas and cultural regions; methods of regional delineation. Agro climate regions, Application of Geographic Information System and Remote sensing Techniques

9: Elements of Sociology

Socialization- Social institutions: marriage, family and kinship- modernization and development; social transformations and globalization; social mobility – rural and urban transformation: Globalization - sociology of development: planned development and society- re-inventing development; decentralization and participatory approach sustainable development.

10: Principles of Economics

Macro and microeconomics: factors of production -consumer behaviour and preferences; welfare economics - social welfare function, goods and market, demand and supply, input-output model, cost-benefit analysis. Development and growth indicators of economic development: poverty and inequalities – economic growth in India.