

# SPA Vijayawada

## **PG Direct Admissions in Masters in Planning with specialisation in Environmental Planning and Management / Urban and Regional Planning / Transport Planning** **(Academic Year 2024-25)**

### **Question Paper Template**

- 1. Duration of the entrance examination is 1 Hour**
- 2. Question Paper shall be for 50 marks**
- 3. There will be 30 Objective type or MCQs with one mark each and 03 descriptive type questions with 10 marks each, out of which 02 Questions need to be answered.**

### **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 medieval renaissance, etc.; recent trends in contemporary architecture: art nouveau, art deco, eclecticism, international styles, post modernism, deconstruction in architecture, etc.; Critical Regionalism, 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; Agro climate regions, Application of Geographic Information System and Remote sensing Techniques

### **9: Elements of Sociology**

Theories of Sociology, 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, Law of demand and supply, Regional Economics, input-output model, cost-benefit analysis. Development and growth indicators of economic development: poverty and inequalities; economic growth in India.