#### **ANDHRA PRADESH**

## RECRUITMENT OF ASSISTANT PROFESSORS IN THE UNIVERSITY SYLLABUS FOR THE SCREENING TEST

### INTERIOR DESIGN SUBJECT CODE - 77

#### **CHAPTER 1 – DESIGN AND DRAWING GRAPHICS**

Organization of space, Circulation, Universal design, Building bye-laws, Codes and standards, Elements and principles of design; Principles of composition, Colour systems, psychological impact of colors, Rule of Thirds, Centre Of Interest, Biophilic, Biomimicry approaches in design. Interior Design Graphics, Visual Composition in 2D and 3D, Orthographic projects, Symbols and representations, Sociography.

#### **CHAPTER 2 - INTERIOR LANDSCAPE, SIGNAGES AND ADAPTIVE REUSE**

Interior landscape, types of landscape elements, the study of plants inrelation to landscape design and interiors - colors, texture, and its visual perception in interiors, Design concepts, and elements related to landscape, Science of maintaining and growing greenery, Environmental graphics, signages categories, and materials. Theory and methods of Adaptive reuse and recycle, Guidelines of adaptive reuse, Building, and heritage conservation. Cultural inheritance and finishes.

#### **CHAPTER 3 – INTERIOR CONSTRUCTION AND MATERIALS**

Interior construction techniques, staircase, Joinery Details, Doors and windows, Wall partitions, Masonry, wood, Paints, Glass, Adhesive, Metals, Stones, Rubber, Fabrics and other furnishing materials, Ceiling materials, wall coverings, Greenmaterials.

#### **CHAPTER 4–INTERIOR ESTIMATIONS AND PROJECT MANAGEMENTS**

Types and methods of estimations, Bill of quantities, Rate of analysis, Tools and techniques of project management -Flow Charts, Gantt Charts, Matrix Organisation, PERT, CPM.

#### **CHAPTER 5 – DIGITAL TOOLS AND TECHNIQUES**

Autocad–UCS, Basic Commands for drawing and dimensioning, Plotting, and sheet settings. Photoshop – Toolbox, layers, brushes, masking tools, and properties Sketchup - Application of materials, and color, Scene setup - virtual objects, lights, cameras Rendering Techniques – Vray, Lumion, Enscape.

# CHAPTER 6 – HISTORY OF INTERIOR DESIGN, ARTS AND CRAFTS IN INTERIORS

Elements of style and determinants of Interior environments from Ancient Civilization to the present modern period - different periods and cultures. Art and Design -Art, Ornamentation and decoration Ornaments and accessories, Interior time line, Indian architecture in interiors- Pioneers.

Relevance of Arts and crafts design elements to Interiors. Influence of regional crafts in interiors. Techniques developed in art, craft, and design. Materials developments in art, craft, and design. Influence of Ancient Indian Crafts on Modern Interior Design

#### **CHAPTER 7 – PRODUCT AND FURNITURE DESIGN**

Anthropometry, Humanbody structure, and function, Anthropometric measuring techniques Ergonomics, an discipline approach, Behaviour and perception, Visual ergonomics, Principles of Universal Design and their application in furniture and product design. FurnitureTimelineandEvolution; Design approaches in furniture design, Typologies, modular approach to furniture and product design, Gestalt's Theory of Visual Composition.

#### **CHAPTER 8 – ACOUSTICS AND LIGHTING**

Roomacousticsbehaviorofsound, Noisetransmission, and reduction, the effect of geometry and shapes, reverberation- reverberation time, Sabine's formula, echo, Acoustics standards and considerations, Acoustic materials, and properties.

Product and furniture design

Source and types of lighting, Colour, and measurement of light, styles of lighting, Lightingstandards –Designconsiderations. Lighting materials.

#### **CHAPTER 9 – CLIMATOLOGY AND THERMAL COMFORT**

Climaticzonesin India, Thermal Comfort, Heatflowwithinthebuildings, Passiveandactive strategiesforlightingandventilation, Microclimateanalysis, Climateandbuilt-form interaction. Wind and solar control, air movement in buildings, Passive solar heating & cooling.

#### **CHAPTER 10 – BUILDING SERVICES AND STRUCTURES**

Water supply and distribution system; Water harvesting systems; Principles, Planning, and Design of storm water drainage system; Sewagedisposalmethods; Recycling and Reuse of solid waste management, HVAC, and Firefighting systems.

Elements of structure, function, and behavior, Types of the column, RCC, Primary and secondary forces on structures, Structural properties of basic materials, The structural system for interiors – False ceiling, False flooring, Suspended flooring, and ceiling.

#### **CHAPTER 11 – MARKETING INTERIORS AND PROFESSIONAL PRACTICE**

Different marketing strategies, Marketing analysis–Socio-economicbehaviour, Concept of the marketing mix, 4P's Marketing approaches.

Role of Interior Designer in Society, Interior Designers approach to works, Contracts, Tenders, Arbitration.