

# GUJARAT TECHNOLOGICAL UNIVERSITY

## Diploma in Architectural Assistantship

### Semester: 4

**Subject Name**    ARCHITECTURAL DESIGN - III

Sr. No.	Course content
1.	<b>DESIGN TOOLS: ORIENTATION</b> 1.1 Orientation as the effect of the sun, wind, temperature and rain on the design of the building. 1.2 "MICROCLIMATE" of the site and its environment in relation to topography.
2.	<b>HEIRARCHY &amp; CIRCULATION</b> 2.1 Circulation path and how it links various spaces in a building. 2.2 Types of circulation spaces with sketches e.g. corridors, balcony, gallery, stairs, hallways etc. and their proportions. Analysis of requirements and preparation of circulation diagrams and flow charts.
3.	<b>SPATIAL RELATIONSHIP</b> 3.1 Draw and explain how a large space can contain a smaller space within its volume and how it gives visual and spatial continuity. 3.2 Also draw and explain interlocking spaces. 3.3 Spaces linked by common space 3.4 Explain spatial organization e.g. a Central dominant space around which a number of secondary spaces are grouped. 3.5 A linear sequence of repetitive spaces. 3.6 Radial - A central space from which linear organization of spaces extend in a radial manner. 3.7 Clustered - Spaces grouped in a way that they have a common visual relationship. 3.8 Grid -- Spaces organized within a structural grid.
4.	<b>SCALE AND PROPORTION</b> Scale and proportion as reference to the size of the building elements or space relative to other forms.
5.	<b>ORDERING PRINCIPLES</b> Order refers to not only a geometric regularity but also a condition in which each part of whole is properly arranged with other parts so as to produce a harmonious whole. Axis – it is a line established by points in space about which forms and spaces can be arranged in a regular or irregular manner. Symmetry – a condition in which parts are arranged in balanced or equivalent patterns of forms on opposite side of dividing line or plane. Rhythm – it refers to any movement characterized by a patterned recurrence of elements at regular or irregular intervals. Repetition – it is a recurrence of elements in a visual composition.

<b>6.</b>	<b>Architectural consideration for seismic design</b> 6.1 Configuration 6.2 Regular configuration 6.3 Irregular configuration 6.4 Proportion 6.5 Setback 6.6 Plan density 6.7 Perimeter 6.8 Redundancy 6.9 Symmetry 6.10 Asymmetry 6.11 Soft stories 6.12 Weak stories 6.13 Code provision 6.14 Plan irregularities 6.15 Elevation irregularities 6.16 Architectural implementation
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## **TERM WORK**

**Design a small public building like Branch Bank, Branch Post Office, Restaurant, Library, Primary School, K.G. School, Dispensary, Clinic, Police Station, Small Departmental Store etc.**

- a) Data collection & Analysis
- b) Development of concept
- c) Prepare sketch design
- d) Prepare Plans for all floors
- f) Prepare elevation
- g) Prepare sections
- h) Prepare site plan
- i) Prepare furniture layout
- j) Prepare 3D drawings
- k) Preparation of final presentation drawings

## **Reference Books :**

- 1) Form Space & Order - D.K.Ching
- 2) Pattern Language - Christopher Alexander.
- 3) Architecture for India - William Curtis (B.V.Doshi)
- 4) Charles Correa – Hassan- Udin- Khan
- 5) Magazines and periodicals of Architecture, Interior Design & Const. Technology