

## AR-111 ARCHITECTURAL DRAWING AND GRAPHICS – I :: C-16

<b>Subject Title</b>	<b>:Architectural Drawing and Graphics - I</b>
<b>Subject Code</b>	<b>:AA-111</b>
<b>Periods / Week</b>	<b>:04</b>
<b>Periods / Semester</b>	<b>:72</b>
<b>Credits</b>	<b>:4</b>
<b>Internal Assignments &amp; Mids</b>	<b>:50 Marks</b>
<b>External Examinations</b>	<b>:50 Marks</b>
<b>Total Marks</b>	<b>:100 Marks</b>
<b>Duration of Exam</b>	<b>:3 Hrs (University Exam, Drawing &amp; Theory)</b>

### TIME SCHEDULE

S. No	Major Topics	No. of periods	Weightage of marks	No of short ans. questions	No of essay ans. questions
1.	Unit-I (Introduction & Drawing Equipment)	2	-	-	-
2.	Unit-II (a) Sheet Sizes	2	-	-	-
	(b) Simple Drafting exercises	8	10	-	1
	(c) Line weights and Line types	2	5	1	
	(d) Dimensioning	2	-	-	
	(e) Lettering	4	5	1	
		Title panels and legends	2	-	-
8.	Unit-III (Geometrical construction)	14	10	-	1
9.	Unit-IV (Architectural Symbols)	8	10	2	-
10.	Unit-V (Measuring and Drawing to Scale)	16	20	-	2
11.	Unit-VI (Free Hand Drawings)	12	10	-	1
	<b>Total:</b>	<b>72</b>	<b>70</b>	<b>4</b>	<b>5</b>

- Note:**
1. Duration of examination is for 3 hours Drawing & Theory Examination
  2. Part A: 4 questions – each question carries 5 marks, all 4 to answer and no choice
  3. Part B: 3 questions have to be answered out of 5 questions each question carries 10 marks (2 are choice)

#### **Course Overview:**

The course introduces the fundamental techniques of architectural drawing and develops the appropriate skills for visualization and representation.

#### **Objectives of the Course:**

To introduce architectural drawing techniques and to facilitate effective visual communication.

**Expected Skills / Knowledge Transferred:** Freehand, scale drawing, conventional

architectural representations in drawings and graphics.

### **Course Contents:**

#### **Unit – I**

**Introduction:** Fundamentals of drawing and its practice, introduction to drawing equipment, familiarization, use and handling.

#### **Unit – II**

**Drawing:** Drawing sheet sizes, layouts and composition. Simple exercises in drafting, line types, line weights; dimensioning, Typography –anatomy of Type, Styles, Roman and Gothic style lettering; Freehand lettering, title panels and legends.

#### **Unit – III**

**Geometrical Construction:** Constructing simple and complex geometrical shapes involving various drafting technique drawing regular shapes using T-squares, set-squares; Special methods of drawing regular polygons; Regular polygons inscribed in a Circle.

#### **Unit – IV**

**Architectural Symbols:** Representation of building elements, openings, materials, furniture and accessories; human postures; vegetation; vehicles; terminology and abbreviations used in architectural representation.

#### **Unit – V**

**Measuring and Drawing to Scale:** Scales and construction of scales, scaled drawings of simple objects, furniture, rooms, doors and windows etc., in plan, elevation and section. Reduction and enlargement of drawings.

#### **Unit – VI**

**Free Hand Drawings:** line strokes, light and shade techniques of simple, natural and 3D geometric forms. Study of proportions and scale; structure and axes of objects; Outdoor sketching of simple building forms.

Note: This is a studio subject and students should be made to prepare drawings as studio exercises along with the theoretical inputs. The studio work should be supplemented with appropriate site visits.

### **Reference books:**

- **Moris, I.H.** Geometrical Drawing for Art Students.
- **Thoms, E. French.** Graphic Science and Design, New York: MC Graw Hill.
- **Nichols, T.B. and Keep, Norman.** Geometry of Construction, 3<sup>rd</sup> ed. Cleaver – Hume Press Ltd., London, 1959.**Bhatt, N.D. and Panchal V.M.** Engineering Drawing: Plane and Solid Geometry, 42<sup>nd</sup> ed. Charotar Pub., Anand, 2000.
- **Gill, P.S.** T.B. of Geometrical Drawing, 3<sup>rd</sup> ed. Dewan Suhil Kumar Kataria, Ludhiana, 1986.
- **Shah, M.G., Kale, C.M. and Patki, S.Y.** Building Drawing: with an integrated approach to built environment, 7<sup>th</sup> ed. Tata McGraw Hill Pub., Delhi, 2000.
- **Bies, D. John.** Architectural Drafting: Structure and Environment. Bobbs – Merrill Educational Pub., Indianapolis.
- **Nelson, A. John.** H.B. of Architectural and Civil Drafting, Van Nostrand Reinhold, New York, 1983.