Lok Jagruti Kendra University
University with a Difference

Diploma
in
Architectural Assistantship

Course Code:025080505
Architectural Module

Programme/ Branch Name			Diploma in Architectural Assistantship			
Course Name	Architectural Module				**Course Code**	025080505
Course Type	HSSC	BSC	ESC	PCC	OEC	PEC

Legends: HSSC: Humanities and Social Sciences Courses BSC: Basic Science Courses
ESC: Engineering Science Courses PCC: Program Core Courses
OEC: Open Elective Courses PEC: Program Elective Courses

1. Teaching and Evaluation Scheme

Teaching Hours / Week / Credits				**Evaluation Scheme**			
L	**T**	**P**	**Total Credit**	**CCE**	**SEE (Th)**	**SEE (Pr)**	**TOTAL**
0	0	4	2	50	-	50	100

Legends:
L: Lectures T: Tutorial P: Practical
CCE: Continuous & Comprehensive Evaluation
SEE (Th): Semester End Evaluation (Theory)
SEE (Pr): Semester End Evaluation (Practical)

2. Prerequisites

- ✓ Basic understating of mathematics, physics, chemistry and sketches.

3. Rationale

Skills such as drawing, observation, proportion sense, aesthetic sensitivity along the capability of critical thinking will be developed. All these vital skills are either possessed or may be acquired after training along with practice which is essential in the study of architecture.

4. Objectives

- ✓ Understanding geometry and the ability to visualize the shape and solve geometrical puzzles to test spatial intelligence.
- ✓ Understanding of scale and proportions.
- ✓ Understanding colour theory and the various terminologies to test colour scheme awareness and knowledge.
- ✓ Creating interesting two-dimensional compositions using given shapes and forms.
- ✓ Combining and composing given three-dimensional elements to form a building or structural form.
- ✓ Basic understanding of physics, chemistry and mathematics.
- ✓ Practices of reasoning questions.

5. Contents

Unit No.	Unit Name	Topics	Learning Outcomes	% Weightage	Hours
1	**Drawing**	1.1. Importance of architectural module 1.2. Creating 2d and 3d compositions, 1.3. Understanding of scale and proportion of objects, shape, aesthetics, colour texture, building forms and elements, etc. 1.4. Memory sketch (1 point /2 points / 3 points perspective	• Draw different types of drawing and sketches like composition, perspective	60	30
2	**Physics**	2.1. Atoms & nuclei, 2.2. Current electricity, 2.3. Dual nature of radiation and matter, 2.4. Electronic devices, electrostatics, optics	• Basic understanding of atom, nuclei, electricity, electronic devices, etc.	5	4
3	**Chemistry**	3.1. Basic concepts of chemistry. 3.2. Chemical bonding, chemical elements classification. 3.3. Organic chemistry 3.4. Structure of atoms	• Basic understanding of chemical bonding, elements classification and structure of atoms	5	4
4	**Mathematics**	4.1. 3-dimensional co-ordinate geometry, 4.2. Algebra, application of calculus, coordinate geometry, 4.3. Logarithms, matrices, permutation and combination, 4.4. Statistics and probability, 4.5. Theory of calculus, 4.6. trigonometry.	• Basic understanding of 3d dimension, algebra, logarithms, matrices, statistics and trigonometry	5	4
5.	**General Aptitude**	5.1. Mathematical reasoning, 5.2. Sets and relations, 5.3. Mental ability, 5.4. Analytical reasoning	• Understanding of mathematical and analytical reasoning	25	14
				Total Hours	**56**

6. List of Practical / Exercise

Sr. No	Practical / Exercises	Key Competency	Hours
1.	Prepare sketches of 2D & 3D compositions	Composition and colour	14
2.	Prepare memory sketches (1 point /2points / 3points perspective)	Sketches (perspective)	8
3.	Prepare sketches of buildings or elements.	Building sketches	8
4.	Solve questions of physics	Physics MCQ	4
5.	Solve questions of chemistry	Chemistry MCQ	4
6.	Solve questions of mathematics	Mathematics MCQ	6
7.	Solves reasoning questions	Reasoning	12

7. Reference Books

1) Concept of physics by H.C. Verma.
2) The Cambridge Handbook of Physics Formulas by Graham Woan. Call Number: QC61.W67 2000. ISBN: 0521573491. Publication Date: 2000-06-19.
3) Encyclopedia of Applied Physics by George L. Trigg; Eduardo S. Vera; Walter Greulich.
4) Lange's Handbook of Chemistry. QD 65 L36 1992 Stacks.
5) Concise Inorganic Chemistry. J D Lee.
6) The Princeton Companion to Mathematics, Author: Timothy Gowers
7) Bhatt, N. D. (2003). Engineering Drawing. Anand: Charotar Publishing House.

8. Open Sources (Website, Video, Movie)

1) https://www.coa.gov.in/index1.php?lang=1&level=0&linkid=42&lid=218