

## 2.1 ENVIRONMENTAL SCIENCE

Periods/Week                      L T P  
3 - -

### RATIONALE

A diploma holder must have knowledge of different types of pollution caused due to industries and constructional activities so that he may help in balancing the eco system and controlling pollution by pollution control measures. He should also be aware of environmental laws related to the control of pollution.

### DETAILED CONTENTS

1. Basics of ecology, eco system and sustainable development (03 Periods)
2. Conservation of land reforms, preservation of species, prevention of advancement of deserts and lowering of water table (04 Periods)
3. Sources of pollution - natural and man made, their effects on living and non-living organisms, Pollution of water - causes, effects of domestic wastes and industrial effluent on living and non-living organisms, Pollution of air-causes and effects of man, animal, vegetation and non-living organisms, Sources of noise pollution and its effects (18 Periods)
4. Solid waste management; classification of refuse material, types, sources and properties of solid wastes, abatement methods (06 Periods)
5. Mining, blasting, deforestation and their effects (03 Periods)
6. Legislation to control environment (04 Periods)
7. Environmental Impact Assessment (EIA), Elements for preparing EIA statements (04 Periods)
8. Current issues in environmental pollution and its control, role of non-conventional sources of energy in environmental protection (06 Periods)

### RECOMMENDED BOOKS

1. Environmental and Pollution Awareness by Sharma BR; Satya Prakashan, New Delhi.
2. Environmental Protection Law and Policy in India by Thakur Kailash; Deep and Deep Publications, New Delhi.
3. Environmental Engineering and Management by Suresh K Dhamija; SK Kataria and Sons, New Delhi.
4. Environmental Science by Deswal and Deswal; Dhanpat Rai and Co. (P) Ltd. Delhi.

### SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted for Lectures (Periods)</b>	<b>Marks Allotted (%)</b>
1	03	6
2	04	10
3	18	40
4	06	12
5	03	04
6	04	08
7	04	08
8	06	12
<b>Total</b>	<b>48</b>	<b>100</b>

## 2.2 ENGLISH AND COMMUNICATION SKILLS – II

	L	T	P
Periods/Week	3	2/2	2

### **RATIONALE**

Interpersonal communication is a natural and necessary part of organizational life. Yet, communicating effectively can be challenging because of our inherent nature to assume, overreact to and misperceive what actually is happening. Poor communication or lack of communication is often cited as the cause of conflict and poor teamwork. In today's team-oriented workplace, managing communication and developing strategies for creating shared meaning are crucial to achieve results and create successful organizations. The goal of the Communicating Skills course is to produce civic-minded, competent communicators. To that end, students must demonstrate oral as well as written communication proficiency. These include organizational and interpersonal communication, public address and performance. The objectives of this subject are understanding how communication works, gaining active listening and responding skills, understanding the importance of body language, acquiring different strategies of reading texts and increasing confidence by providing opportunities for oral and written expressions.

### **DETAILED CONTENTS**

#### **Section A**

1. FACETS OF LITERATURE (22 Periods)
  - 1.1 Fiction
    - 1.1.1 The Portrait of a Lady - Khushwant Singh
    - 1.1.2 The Doll's House – Katherine Mansfield
    - 1.1.3 The Refugees – Pearl S. Buck
  - 1.2 Prose
    - 1.2.1 Of Truth – Francis Bacon
    - 1.2.2 Praises of Solitude – Samuel Johnson
    - 1.2.3 A Gentleman – John Henry Newman
  - 1.3 Poems
    - 1.3.1 All The World's A Stage – W. Shakespeare
    - 1.3.2 A Solitary Reaper – William Wordsworth

#### **Section B**

2. READING SKILLS (08 Periods)

Unseen comprehension passages (at least 3 passages).

3. WRITING SKILLS (16 Periods)

- 3.1 Writing Notice
- 3.2 Writing Circular
- 3.3 Writing a Memo
- 3.4 Agenda for a Meeting
- 3.5 Minutes of the Meeting
- 3.6 Press release
- 3.7 Telephonic Messages
- 3.8 Paragraph writing:  
Simple and Current Topics should be covered.

4. Correspondence (06 Periods)

- 4.1 Business Letters
- 4.2 Personal Letters

5. Communication (12 Periods)

- 5.1 Media and Modes of Communication
- 5.2 Channels of Communication
- 5.3 Barriers to Communication
- 5.4 Listening Skills
- 5.5 Body language
- 5.6 Humour in Communication

### LIST OF PRACTICALS

**(Note: The following contents are only for practice. They should not be included in the final theory examination)**

1. LISTENING COMPREHENSION

- 1.1 Locating Main Ideas in a Listening Excerpt
- 1.2 Note-taking

2. DEVELOPING ORAL COMMUNICATION SKILLS

- 2.1 Offering-Responding to Offers
- 2.2 Requesting-Responding to Requests
- 2.3 Congratulating
- 2.4 Expressing Sympathy and Condolences
- 2.5 Expressing Disappointments
- 2.6 Asking Questions-Polite Responses
- 2.7 Apologizing, Forgiving
- 2.8 Complaining
- 2.9 Persuading
- 2.10 Warning
- 2.11 Asking for and Giving Information

- 2.12 Giving Instructions
- 2.13 Getting and Giving Permission
- 2.14 Asking For and Giving Opinions
- 2.15 Group Discussion

### LIST OF REFERENCE BOOKS

1. Communicating Effectively in English, Book-I by Revathi Srinivas; Abhishek Publications, Chandigarh.
2. High School English Grammar and Composition by Wren & Martin; S. Chand & Company Ltd., Delhi.
3. Communication Techniques and Skills by R. K. Chadha; Dhanpat Rai Publications, New Delhi.

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted for Lectures and Tutorials (Periods)	Marks Allotted (%)
1	22	34
2	08	12
3	16	24
4	06	10
5	12	20
<b>Total</b>	<b>64</b>	<b>100</b>

## 2.3 HISTORY OF INTERIOR DESIGN

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2 - 9

### **RATIONALE**

This course aims at creating appreciation among the students about history and development of art and culture and its impact on interior design.

### **DETAILED CONTENTS**

1. Traditional Indian folk and tribal arts and handicrafts. Knowledge of various styles prevalent in different states.
2. Study of folk designs and motifs used on walls, floors and utility objects, such as madhubani, kalamkari, warli, rangoli, sankhera, in metal bidri works, filigiri etc
3. Study of inlay and meenakari in relation to interiors .
4. Study of Mughal motifs and artistic features.(Taj Mahal, Red Fort, Fatehpur Sikri)
5. Decorative features of Buddhist Architecture.
- 6 Gothic, Greek and Roman Architectural features and motifs.
7. Furniture styles of various period focusing on chair, table & desk
  - (i) Tudor, Jacobean style
  - (ii) FRENCH :- Louis xiv, xv, xxi, Directive, empire
  - (iii) ENGLAND:- William & Marry, Queen Anne, Early Georgian
  - (iv) AGE OF DESIGNERS:- Thomas chippendle, Adom brother, George-  
- happplewhite, Thomas sherton
  - (v) NEO CLASSICAL STYLE
8. Architectural styles of following Architects
  - (I) LAURIE BAKER
  - (II) EDWIN LUTYENS
  - (III) LE-CORBUSIER
  - (IV) HAFEEZ CONTRACTOR

NOTE: Emphasis on sketches. Evaluation should be done in internal exams exclusively for sketches.

### **RECOMMENDED BOOKS**

1. Oxford History of Art: Indian Art by Partha Mitter
2. Marg Magazine of the Arts
3. Encyclopedia Britannica

## 2.4 RESIDENTIAL INTERIORS

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2 - 9

### RATIONALE

The objective of this course is to develop the ability to design and execute residential interiors. This particular course aims at preparing plans, elevations, section and orthographic details of a single room apartment with kitchen and bath. Emphasis will be placed on residential precedents, design process, human factors and detailing and presentation techniques.

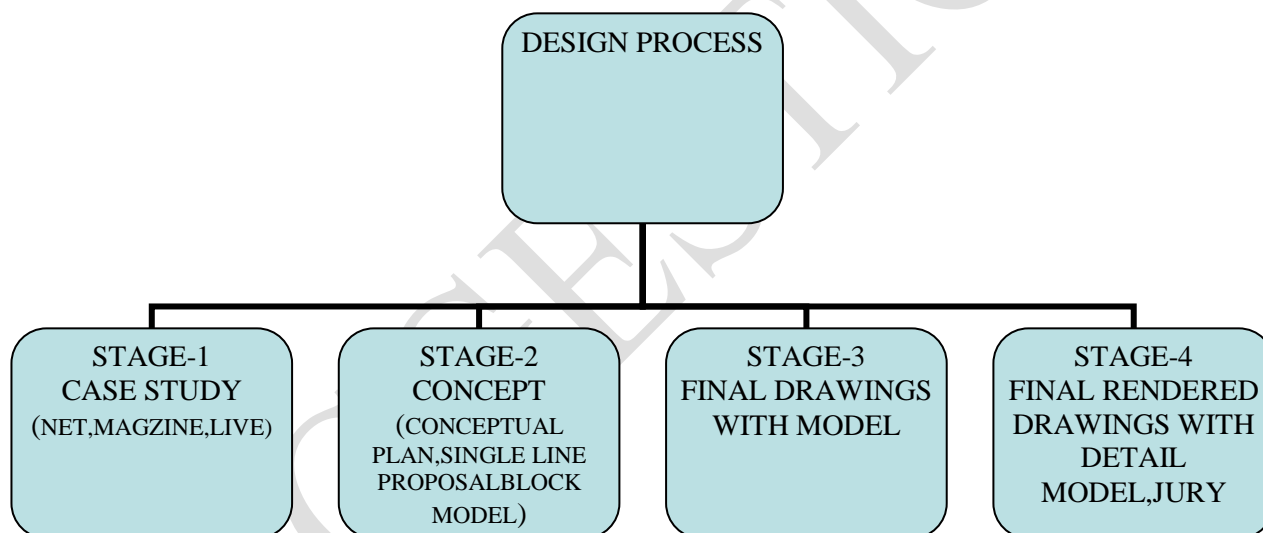
### DETAILED CONTENTS

#### INTERIOR SCHEME

Design a one-bed room apartment with emphasis on kitchen and bathroom detailing and design. Students will be provided with a plan, within which they will have to do the furniture layout, showing the materials and finishes.

#### METHODOLOGY

- 1.SYNOPSIS (design statement, its need& problems) -atleast 01 pg (A4size)
- 2.DESIGN SUBMISSION



\*\*Internal as well as external evaluation will be based on above four stages performance.

#### DRAWING REQUIREMENTS

Drawings to be prepared

- Furniture layout plan (one sheet)
- Detailed plan, section of kitchen, Anthro (-2 sheets)
- Detailed plan, section of bathroom, Anthro ( -2 sheets)
- Sectional elevation
- Separate boards showing finishes and materials (three boards)

Minimum Sheets required =10

Note: Relevant theory will be taught along with studio work. There will be no theory pages in this subject. Students will carry out market survey for kitchen and bathroom fittings and furnishings etc. students will be taken for site visits as required.

#### RECOMMENDED BOOKS

1. Times Savers Standards
2. Periodicals and Magazines

## 2.5 DRAFTING AND RENDERING STUDIO

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### RATIONALE

Graphic presentation is the language of designers, which is a means of communication among all those involved in the system. Lettering and perspective views play an important role.

### DETAILED CONTENTS

#### PART-A

1. Lettering (4 sheets)
  - 1.1 Measured lettering (ratio between height and width of letters), Roman Gothic and Italics. Standard and technique used-pen, pencil and brush
  - 1.2 Knowledge of standardized drawings, various architectural symbols and usage in drawings
2. Perspective Views (4 sheets)
  - 2.1 Terminology of perspective drawing, vanishing points, one point, two point
  - 2.2 Simple exercises on one point and two point perspective of three dimensional geometrical shapes
3. Three Dimensional Drawings (2 sheets)  
Drafting of simple furniture objects with projections, showing isometric view, front elevation, side elevation, plan etc
4. Basic knowledge of Anthropometrics and Circulation. Sheet on circulation paths (4 sheets)

#### PART-B

1. Design Process  
The students determine which element to use and how to arrange them into patterns through the process of design, having the following parts:
  - Design statement – its need and problem
  - Collection of data through interview and literature search
  - Analysis and synthesis of data
  - Ideation of design based upon the analysis of the data collected
  - Choosing and implementing the design solution
2. Measure drawing
  - measure any car & draft its PLAN,ELEVATION(F,R,S),SECTION on scale

#### NOTE:

1. There will not be any theory paper in this subject.
2. Visits to art galleries and museum should be organised to create appreciation of art and its application to Interior Design

Total Number of Sheets =

### RECOMMENDED BOOKS

1. Graphic Thinking for Architects and Designers
2. Drawing : A Creative Process by Francis DK ChiNG
3. Pen & ink by RW GILL



## 2.6 CONSTRUCTION & MATERIALS

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### RATIONALE

The construction techniques are directly related with interior design works for example knowledge of brick work is essential for developing competency of decorative brick work, decorative tiling, dado in brick work etc. Similarly knowledge of timber construction is necessary for interior decoration involving timber work. Knowledge of floor finishing is also required in interior design. The specifications of these are required to train the students so that they may be able to execute various interior projects.

### DETAILED CONTENTS

#### PART -A (CONSTRUCTION)

##### Theory - Practical

1. Foundation - introduction, Types of foundation- Types of foundation : Brick foundation plan and Section, RCC foundation plan and Section, stepped foundation - plan and section (Two Sheets)

2. Brick Masonry : English and Flemish bonds. (Two sheets)  
- Decorative brick work (wall elevation) (One sheet)

3. Stone Masonry: Ashlar and Rubble masonry  
- Decorative stone work (One sheet)

4. Openings:

Arches, lintels: types and terms (One sheet)

Types of doors and terms

Types of windows

- Types of arches and lintels;

- Doors and windows

- Simple, glazed (two sheet)

- Panelled, fly-proof, flush door,  
glazed and paneled (three sheet)

- Window, Bay window, sky light,  
hinged window, ventilators, grill  
design (three sheet)

6. Waterproofing Material: Type and application tar and bitumen.

Total number of sheets 15 Minimum

#### PART-B (MATERIALS)

1. Paints, Varnishes, Polishes, Distempers etc. (5 hrs)

- Wall and furniture finishes like paints

- Water based paints

- Dry distempers

- Plastic emulsion distempers

- Cement paints

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- Varnishes

- Polishes lacquer polyurethane

- Silica paints

- Properties

- Covering capacity

- Handling technique and uses

3. Plaster:

- Defects in mixing , curing , repair ,finished plaster.

4. WOOD:

Properties , uses, availability, cost , defects.

5. STEEL and METAL:

- Application of various metals in interior , different types and uses.

6. GLASS and MIRROR :

Properties, size , design , availability.

**Note :**

1. Relevant theory should be taught along with practical exercises.

2. Relevant site visits to explain the various topics must be carried out to add to the practical knowledge of the students

**RECOMMENDED BOOKS**

1. A Text Book of Building Construction” by SK Sharma and BK Kaul;Published by S Chand and Company Ltd., Ram Nagar, New Delhi.

## 2.7 ADVANCED WORKSHOP PRACTICE

pds/Weeks                      L T P  
   - - 4

### RATIONALE

Psychomotor skills are mastered through practice, an opportunity therefore, has been extended to students through this course to refine their skills in different trades. The basic skills developed during first semester will be refined during this course by doing higher order skills jobs. In addition to developing general manual and machining skills in the students, the objective of development of sense of dignity of labour, precision, safety at work places, team working and right attitude among the students will also be met.

### DETAILED CONTENTS (PRACTICALS)

**Note:** The students are supposed to come in proper workshop dress prescribed by the institute. Wearing shoes in the workshop(s) is compulsory. Importance of safety and cleanliness, safety measures and upkeep of tools, equipment and environment in each of the following shops should be explained and practiced. The students should prepare sketches of various tools/jobs in their practical Notebook.

The following shops are included in the syllabus.

#### 1. Carpentry and Painting shop-II

##### **Carpentry and Painting Shop-II**

#### 1.1 Introduction to joints, their relative advantages and uses.

Job I Preparation of dovetail joint and glued joint.

Job II Preparation of mitre joint

Job III Preparation of a lengthening Joint

Job IV Preparation of at least one utility job with and without lamination.

#### 1.2 Demonstration of job showing use of rip saw, bow saw and tenon saw, method of sharpening various saws.

#### 1.3 Demonstration of job on band saw and circular saw, chain and chisel,

universal wood working machine, Saw re-sharpening machine, saw brazing unit.

- 1.4 Importance and need of polishing wooden items. Introduction to polishing materials.

Job V Polishing on wooden items.

### **Painting and Miscellaneous Shop**

1. Introduction to white wash and distemper
2. Introduction to different types of primers
3. Preparation of white wash and practice of white washing
4. Preparation of different types of distempers and practice of distempering
5. . Introduction to primers, oil paints and wood polishes
6. Practice of painting on wooden work
7. Practice of painting steel work
8. Preparation of furniture polish and polishing practice
9. Introduction to welding joints in furniture items such as chairs, tables etc.
10. Visits to furniture houses and carpentry shops