



**EVALUATION SCHEME  
DETAIL SYLLABUS  
FIRST & SECOND SEMESTER  
(INTERIOR DESIGN)**







**UTTARAKHAND BOARD OF TECHNICAL EDUCATION**  
**JOINT ENTRANCE EXAMINATION AND TRAINING, RESEARCH DEVELOPMENT CELL, DEHRADUN**  
**STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME**

**BRANCH NAME– INTERIOR DESIGN**

**SEMESTER –FIRST**

Subject Code	Subject	L	T	P	T O T	EVALUATION SCHEME						Total Marks	Credit Point			
						Internal			External							
						Theory			Practical		Theory			Practical		
						Max Marks			Max Marks		Max Marks			Hrs.		
Period/Weeks																
991001	English Communication Skills-I*	3	1	2	6	20	30	50	2:30	50	3:00	150	3			
991005	Computer Fundamentals*	2	-	3	5	10	10	50	2:30	30	3:00	100	3			
131001	Basic Design and Modelling	2	-	10	12	-	100	100	3.0	75	2.5	275	7			
131002	Arts and Graphics	-	-	12	12	-	100	100	3.0	75	2.5	275	7			
131003	Materials for Interior Design	7	2	-	9	50	-	100	2.30	-	-	150	5			
131051	General Proficiency#	-	-	4	4	-	25	-	-	-	-	25	-			
131052	Industrial Exposure (Assessment at Inst. Level)+	-	-	-	-	-	25	-	-	-	-	25	-			
<b>TOTAL</b>		<b>14</b>	<b>3</b>	<b>31</b>	<b>48</b>	<b>80</b>	<b>290</b>	<b>400</b>		<b>230</b>		<b>1000</b>	<b>25</b>			

**\*COMMON WITH ENGINEERING 1ST SEMESTER**

#General Proficiency will comprise of various co-curricular activities like games, hobby clubs, seminars, declamation contests, extension lectures, NCC, NSS, cultural activities and discipline etc.

+ Industrial Exposure compulsory at minimum 2 industries or Department.

Note:- 1- Each period will be 50 minutes. 2- Each session will be of 16 weeks. 3- Effective teaching will be at least 12.5 weeks.

**Branch Code - 13**



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**JOINT ENTRANCE EXAMINATION AND TRAINING, RESEARCH DEVELOPMENT CELL, DEHRADUN**  
**STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME**

**BRANCH NAME- INTERIOR DESIGN**

**SEMESTER – SECOND**

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Subject Code	Subject	L	T	P	T O T	EVALUATION SCHEME						Total Marks	Credit Point		
						Internal		External							
						Theory		Practical		Theory				Practical	
						Max Marks	Max Marks	Max Marks	Hrs.	Max Marks	Hrs.				
992001	English Communication Skills-II*	3	1	2	6	20	30	50	2:30	50	3:00	150	3		
992005	Environmental Science & Energy Mgmt.	3	-	-	3	20	-	80	2:30	-	-	100	2		
132002	Appreciation of Decorative Design	4	2	-	6	50	-	100	2.30	-	-	150	5		
132003	Interior Design - I	3	-	10	13	-	100	125	6.0	50	3.0	275	8		
132004	Building Construction-I	3	-	10	13	-	100	100	3.0	75	3.0	275	7		
132051	General Proficiency#	-	-	4	4	-	25	-	-	-	-	25	-		
132052	Industrial Exposure (Assessment at Inst. Level)+	-	-	-	-	-	25	-	-	-	-	25	-		
<b>TOTAL</b>		<b>16</b>	<b>3</b>	<b>26</b>	<b>45</b>	<b>90</b>	<b>280</b>	<b>455</b>		<b>175</b>		<b>1000</b>	<b>25</b>		

**\*COMMON WITH ENGINEERING IIND SEMESTER**

#General Proficiency will comprise of various co-curricular activities like games, hobby clubs, seminars, declamation contests, extension lectures, NCC, NSS, cultural activities and discipline etc.

+ Industrial Exposure compulsory at minimum 2 industries or Department.

**Note:-** 1- Each period will be 50 minutes. 2- Each session will be of 16 weeks. 3- Effective teaching will be at least 12.5 weeks.

**Branch Code - 13**

## English and Communication Skills –I

L	T	P
3	1	2

Subject Code : 991001

### COURSE OUTCOME

After completing this course, the learner will be able to acquire all the five areas of language learning –listening, speaking, reading, writing. While reading and writing skills are parts of theory component, listening and speaking skills will be transmitted through lessons in the practical component. Understanding skills, on the other hand, shall be gained both in theory and practical sessions .

Learning objectives in different areas are defined as follows:

#### I- Reading Skills:

After completing this course, the learner will be able to read and comprehend texts from simple to moderate levels of difficulty.

#### II - Writing Skills:

After completing this course, the learner will be able to

- Write simple to moderately complex sentences.
- Develop a simple idea into a short paragraph.
- Write business and personal letters at a functional level.
- Write specific formats like circulars, notices, press release, memo, agenda and minutes, e-mail, resume.

#### III - Listening Skills:

After completing this course, the learner will be able to listen and understand

- The spoken communication of fellow workers.
- News broadcast on TV and Radio.
- Lectures available on the internet.
- Films and shows in theatres and on TV.

#### IV - Speaking Skills:

After completing this course, the learners will be able to communicate ideas with moderate fluency of speech to their fellow-listeners, using moderately correct speech forms and pronunciation so as to be understandable to a mixed English-speaking audience.

**V - Understanding Skills:** After completing this course, the learners will be able to interpret the common and technical conversation in the language.

### **Methodology of Revision**

Among the five skills listed in the Objectives of the Course, the two skills of Listening and Speaking will be part of practical classes, and will also be tested through Practical Examination. The two skills of Reading and Writing are exclusively the theoretical part of the Course. The fifth skill of Communication has both theoretical and practical components.

All the five skills are to be taught in both the Semesters. The basics of each component will be covered in Semester I, and relatively advanced topics to be covered in Semester II.

### **THEORY**

**Total Marks 40%**

1. Literature: Prose Reading of newspapers, magazines and similar writings is almost a day-to-day requirement for any educated person. To train the learner in reading simple prose texts, we offer a selection of six essays by eminent authors. These essays are chosen both for their content and style. Three of the essayists are from modern India. The content has a contemporary relevance. The style is simple and engaging, and diction is of an average difficulty level. Suggested authors are: Vivekananda, Gandhi. Among the English authors, we have chosen simple and short essays. Suggested essays are: Booker T. Washington-“My Struggle for an Education; Oliver Goldsmith - “The Man in Black”; Stevenson- “A Night Among the Pines”.

2. **Unseen Comprehension Passage.** Preferably, from popular newspapers and magazines.

### **Language and Writing Skills : Basics**

**Total Marks: 30%**

#### **A. Semester I - Language and Writing Skills: Basics**

##### **1. Parts of Speech**

- a) Noun
- b) Pronoun
- c) Verb
- d) Adjective
- e) Adverb
- f) Preposition, Articles
- g) Conjunction
- h) Interjection

##### **2. Tenses**

##### **3. Translation of a simple passage from Hindi to English**

##### **4. Paragraph Writing: Expanding a simple idea into a paragraph.**

##### **5. Letter Writing:**

- a) Business Letters
- b) Personal Letters

**6. Vocabulary:**

- a) Synonyms
- b) Antonyms
- c) Homophones
- d) One word substitution

**III. Communication Skills**

**Total Marks: 30%**

**A. Semester I - Basics**

**Foundations of Communication Skills**

- a) Importance of Communication
- b) Communication as a Process
- c) Methods of Communication: Verbal and Nonverbal
- d) Channels of Communication: Formal and Informal

**ECS SYLLABUS  
SEMESTER - I (THEORY)**

**I. Reading Skills:**

**(18 Periods)**

**A. Literature: Prose**

- 1. Vivekananda :Hinduism (1893 Chicago)
- 2. Gandhi : On Education (From Hind Swaraj)
- 3. Oliver Goldsmith - “The Man in Black”
- 4. R L Stevenson - “A Night Among the Pines”
- 5. Booker T. Washington-“My Struggle for an Education”

**B. Unseen Comprehension Passage.** Preferably from popular newspapers and magazines.

**II. Writing Skills:**

**(15 Periods)**

**Language**

**1. Parts of Speech**

- a) Noun
- b) Pronoun
- c) verb
- d) Adjective
- e) Adverb
- f) Preposition, Articles
- g) Conjunction
- e) Interjection

**2. Tenses**

**3. Translation of a simple passage from Hindi to English**

**4. Paragraph Writing: Expanding a simple idea into a paragraph.**

**5. Letter Writing:**

- a) Business Letters
- b) Personal Letters

**6. Vocabulary:**

- a) Synonyms
- b)Antonyms
- c)Homophones
- d)One word substitution

**III. Communication Skills**

**(15 Periods)**

- a) Importance of Communication
- b) Communication as a Process
- c) Methods of Communication: Verbal and Nonverbal
- d) Channels of Communication: Formal and Informal

### **SEMESTER - I (PRACTICALS)**

**(Listening, Speaking and Communication Skills)**

**I. Phonetics**

**A. Introduction**

**B. Basic Sounds of English**

- 1. Vowels and Consonants
- 2. Phonetic Transcription
- 3. Rules of Pronunciation
- 4. Problem Sounds

**C. Syllables**

**D. Word Stress**

**II. Conversation: Basic Communication**

**A. Starting a Conversation**

- 1. Greetings
- 2. Introducing Oneself
- 3. Introducing Others
- 4. Leave Taking
- 5. Thanking, Wishing Well



**B. Conversation in a Context**

1. Offering - Responding to Offers
2. Requesting - Responding to Requests
3. Congratulating
4. Expressing Sympathy and Condolences
5. Expressing Disappointments
6. Asking Questions - Polite Responses
7. Apologising - Forgiving
8. Complaining
9. Persuading
10. Warning
11. Asking for and Giving Information
12. Giving Instructions
13. Getting and Giving Permission
14. Asking for and Giving Opinion

**Suggested distribution of marks**

<b>Topic No.</b>	<b>Period allotted for lectures and tutorials (Periods)</b>	<b>Marks Allotted (%)</b>
1	18	40
2	15	30
3	15	30
<b>Total</b>	<b>48</b>	<b>100</b>

**Reference/text Book**

1. Developing Communication Skills By Krishna Mohan & Meera Banerjee (Trinity Press, New Delhi)
2. Communication Skilla By Sanjay Kumar And Pusph Lata (Oxford Univ Press, New Delhi).
3. Wren & Martin High School English Grammar & Composition (S. Chand, New Delhi).
4. English & Communication Skills-1 By Vinit Kumar (Book World, Dehradun)
5. Communication Effectively In English, Book-1 By Revathi Srinivas, Abhisekh Publications, Chandigarh.
6. High School English Grammer And Composition By Wren & martin, S. chand Publication & Company Ltd. Delhi.
7. Communication Technics And Skill By R.K. Chadha; Dhanpat Rai Publications, New Delhi.

## Computer Fundamentals

Subject Code : 991005

L	T	P
2	-	3

### Aim:

- To understand basics of Computer.
- To Learn various application software's
- To Learn Usage of Computer System in various Domains

### Objective:

- Students will be able to understand a computer system that has hardware and software components, which controls and makes them useful.
- Students will be able to understand the operating system as the interface to the computer system and basic functions of an operating system.
- Students will be able to Set the parameter required for effective use of hardware combined with application software's
- Students will be able to Use file managers, word processors, spreadsheets, presentation software
- Students will be able to use Internet to send mail and surf the World Wide Web.

### Unit -1 Computer Introduction

(06 Periods)

Introduction about the Data and information, Data Processing definition of computer, Block diagram of Computer System, Components of Computer, Classification of Computer (Analog and Digital), Computer Generation, Characteristics and Applications of Computer, Input and Output Devices, Printer -Inkjet & Laser Printer, Memory- Primary Memory (RAM, ROM, PROM, EPROM EEPROM & UVEPROM, Secondary Memory Devices (Hard Disk, Optical Disk, PEN Drive, OTG, Magnetic Tape) and Memory Tree, CPU Types, Level of Programming Languages, Overview of Instruction, Program, System Software and Application Software.

### Unit -2: Number System

(06 Periods)

Binary, BCD, Grey Code, 3 Excess Code, Octal, Decimal, Hexadecimal Number System, Conversion of Numbers- Decimal to Binary, Decimal to Octal, Decimal to Hexadecimal, Binary to Octal, Binary to Hexadecimal, Octal to Hexadecimal, Hexadecimal to Octal, Floating Point Numbers, Addition and Subtraction of Binary Numbers.

### Unit -3 Operating System

(04 Periods)

Operating System- Definition, Goals and Responsibilities, Window based Operating System, Open Source based Operating System, Single User and Multiuser Operating

System, Multi Programming and Real Time Operating System, GUI V/s CUI, Commands of MS DOS (Create, Read, Edit, Display, Copy, Move, Rename and Delete Operations on Files and Directory).

#### **Unit-4 Networks & Internet**

**(04 Periods)**

Definition of Network, LAN, MAN, WAN, Network Devices, Tools and cables (Switch, Router, Modem, RJ45, CAT Cable, OFC, LAN Tester, Crimping Tool) Network Topology, Protocols (HTTP, URL, FTP), Internet, ISP, Web Browser and web server, Email, www, Search Engine.

#### **Unit-5 Office Application**

**(08 Periods)**

**Word-** Create, Open, Save, Update Files, Word Art, Clip Art, Insert Images, Header & Footer, Table (Insert, Merge, Split Cells, Border & Shading), Page Layout, Page Setup-Margin, Orientation, Page Background- Watermark, Page Border, Paragraph-Indent, Spacing and Text Alignment, Text Formatting- Text Alignment, Sorting, Find & Replacement, Bullet & Numbering.

**Excel-** Worksheet, Formatting Cells, Insert Data Patterns Instantly, Format Painter, Hide Rows & Columns, Charts in Excel, Border & Shading, Sort & Filter, Find & Replace, Page Preview & Printing, Formulas, Calculation Sheet, Copy Formula OR Data Between Worksheets, Header & Footer.

**PowerPoint** – Create Slide, Design Patterns, Animation & Effects in slides, Slide Show.

#### **UNIT-6 Role Of IT**

**(04 Periods)**

Information Technology- Information, Scope and role of Information Technology, Overview of Cyber Laws & IT Act, Ecommerce, e-Governance, National Informatics Centre, Payment Gateway, Overview of Net-Banking- NEFT & RTGS, Mobile Banking (SBI Buddy, RuPay, UPI, BHIM, e-Wallet), Introduction of Geographic Information System, Uses of GIS in Engineering, Optical Codes (MICR, OMR, Barcode, QR Code), Impact of computer on society, Applications of IT.

#### **List of Practical's:**

1. Working with Windows Latest Version- desktop, start icon, taskbar, Recycle Bin, My Computer and Control panel.
2. Exercise on Printing, Installing a printer driver, Setting up a printer , Default and installed printers, Controlling print queues, Viewing installed fonts, The clipboard and drag and drop.
3. Exercise on Text Formatting in Word document with Paragraph formatting, Bullets, page border and numbering, creating and using macros in a document.
4. Exercise on Page formatting, Page margins, Page size and orientation, Page breaks, Headers and Footers, Introducing tables- Rows and Columns.

5. Exercise on Development of application using mail merge, Mail merging addresses for envelopes and letter, printing addressed envelope and letter.
6. Formatting and customizing data, Formulas, functions and named ranges, creating, manipulating & changing the chart type in Spreadsheet.
7. Exercise on Preparing Presentation Slides- Opening and saving a presentation, Inserting Images, Slide show timings, Animation effects.
8. Exercise on Connecting to the Internet, Searching the Internet, Commonly used search engines, writing email, finding an e-mail address, Using electronic mail.
9. Exercises on External and Internal Commands of MS DOS.
10. Create Business Cards using Shapes, text, and color.
11. Design E-book cover pages / Magazine front/ books front/back page.
12. Create and Design Admission/Enquiry Forms using word and Spreadsheet.

#### SUGGESTED DISTRIBUTION OF MARKS

Unit no.	Period Allotted for lectures and Tutorials (Periods)	Marks allotted (%)
1	06	20
2	06	15
3	04	15
4	04	15
5	08	20
6	04	15
<b>TOTAL</b>	<b>32</b>	<b>100</b>

#### Reference/Text Book

1. Computer Fundamentals By P.k. Sinha (Bpb Publications, New Delhi)
2. Computer Fundamentals By Anita Goel ( Pearson Education, New Delhi)
3. Computer Fundamental 5th Edition By P.K. Sinha, Wadsworth, Inc
4. Fundamentals Of Computer By V. Rajaraman, Phi Publication.
5. Fundamental Problems In Computing 5th By D.J. Rosencrantz Springer.
6. Libre Office- The Documentation Foundation By Ron Faile, Jeremy Cartwright, Hal Parker.
7. Microsoft Office 2010 Course Pb (Hindi) Arti Rathore, Bpb Publication.
8. English Communication Skills, By R.K. Tyagi, Nav Distributor, Meerut.

## BASIC DESIGN AND MODELLING

Subject Code : 131001

L	T	P
2	-	10

### PART-A

### BASIC DESIGN

#### RATIONALE

This course aims at creating appreciation of colour, texture, pattern, sense of shape, form proportion, balance, rhythm and harmony for aesthetic finishing and furnishing for executing interior design projects.

#### DETAILED CONTENTS

- 1. Basic Design- Elements and Principles (08 Periods)**
  - 1.1 Introduction of basic design.
  - 1.2 Elements of design: Line, shapes, form, color, value, and textures.
  - 1.3 Principles of design: Repetition, unity, harmony, contrast, balance, rhythm, emphasis, dominance, scale, proportion.
  - 1.4 Importance of murals, paintings and wall hangings in interiors.
  - 1.5 Making of composition using elements and principles of basic design.
  - 1.6 Making of compositions using geometrical, abstract or realistic shapes.  
**(Minimum 7 sheets are to be made)**
  
- 2. Anthropometric Study: Study of human dimensions, space circulation and space requirement for various activities. (05 Periods)**  
**(Minimum 4 sheets are to be made)**
  
- 3. Colours (10 Periods)**
  - 3.1 Terminology: Hue, tints and shades, value, intensity chroma.
  - 3.2 Theory of colours and colour wheel showing primary, secondary, intermediate, tertiary and quarternery colours
  - 3.3 Colour schemes : Preparing colour schemes for different rooms using material samples or showing pattern and textures in details.
  - 3.4 Colour harmony and colour contrast in relation to interior designing. (One interior in various colour schemes using one basic hue with different colour combination)

3.5 Psychological study of colours.

3.6 Psychological effect of colours.

4. Effect of light on colour

5. Effect of pattern on colour

6. Effect of texture on colour

7. Effect of colour on another colours.

8. Psychological effect of colours in interior spaces viz. schools, hospitals offices, residential spaces, commercial buildings.

**(Minimum 20 sheets are to be made)**

**4. Textures And Tones:** Preparation of chart showing different textures and tonal value scale. **(05 Periods)**

**(Minimum 3 sheets are to be made)**

**5. Posters and Murals:** Preparation of posters and murals using monotonous and color full medium showing 3D effect. **(04 Periods)**

**(Minimum 2 sheets are to be made)**

**NOTE:**

1. Theory related to Basic Design and modelling should be taught along with practical work. 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

**RECOMMENDED BOOKS**

1. Rendering in Pen and ink by RW Gill
2. Interior Design Illustrated by DK Ching
3. Colour Harmony - I
4. Colour Harmony – II

**PART-B**

**MODEL MAKING**

**RATIONALE**

Students of interior design at diploma level are required to present their design ideas in 3D in addition to drawings. Model making and presentation aims at imparting the Knowledge and techniques for preparing detailed interior models and their presentation.

## DETAILED CONTENTS

1. Introduction and demonstration of model making materials and techniques.
2. Preparation of block models using basic shapes such as cube, cuboid, cylinder, cone, prism, pyramid etc. using hand made, ivory sheet, thermocol and mount board (3exercises)
3. Making a composition by using block models as made above. (1 exercises)
4. Basic Joinery: Definition, importance, division, types (but miter, lap, rebate, tongue and groove, dovetail and notice tenon) with model.
5. demonstration of various methods of painting wooden items.
  - 5.1 preparation of wooden surface before painting including primer coating.
  - 5.2 painting practice by brush/spray.
  - 5.3 preparation of surface, before painting such as cleaning sanding, putty. Procedure and application of primer code and painting steel items.

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Period Allotted (Hrs)	Marks Allotted (%)
1	08	25
2	05	15
3	10	30
4	05	15
5	04	15
<b>Total</b>	<b>32</b>	<b>100</b>

## ARTS AND GRAPHICS

Subject Code : 131002

L	T	P
-	-	12

### RATIONALE

This subject is aimed at developing skills in drafting and rendering which will be utilized for interpreting /reading drawings pertaining to interior design.

### DETAILED CONTENTS

#### PRACTICAL

1. Knowledge of instruments: Drafting table, set squares, parallel bar, T- square, different type of papers and pencils, rotoring pens/ points, templates, colors and markers etc.
2. Free Hand sketching of symbolic presentation of human figures, trees, vehicles. Buildings .natural environment like leaves, flowers etc. (5 sheets)
3. Sketching of human figures in proper structure and proportion with respect to the environment. (2 sheets)
4. Sociography: Sketching of a composition from different angles & lights (mode-pencil & pastel color) (1 sheets)
5. Geometry (4 sheets)
  - a) Horizontal, vertical, diagonal, curvilinear lines.
  - b) Making composition using geometrical shapes.
6. Lettering: Measured lettering in Roman, Gothic and Italic style using pen, pencil and brush. (3 sheets)
7. Use of graphic symbols in interior design. (3 sheets)
8. **Introduction of scaled drawings.**
  - a) Use of engineering scales - metric, foot and inches.
  - b) Reduction and enlargement. (1 sheets)
9. **Measure drawing (3 sheets)**
  - a) Measurement and drafting of simple solid geometrical objects showing plan and elevation.
  - b) Measurement and drafting of any furniture and a car showing plan, elevation and section to the scale.
  - c) Orthographic projection of irregular objects.



**10. Views**

(3 sheets)

- a) Isometric and axonometric views of simple three dimensional objects.
- b) Perspective views: Terminology of perspective views (vanishing points, one point and two point).

**(Minimum 25 sheets are to be made)**

**Note :** There will be no theory questions in the paper.

**RECOMMENDED BOOKS +**

1. Graphic Communication by W.J. Bowman
2. Universal Design – Handbook



## MATERIALS FOR INTERIOR DESIGN

Subject Code : 131003

L	T	P
7	2	-

### RATIONALE

This course in materials for interior design includes imparting basic knowledge in properties and use of the basic materials and types of finishing and fittings used in interior design.

### DETAILED CONTENTS

1. **Bricks:** Definition, types, properties and uses.
2. **Tiles:** Definition, types, properties and uses.
3. **Cement and Concrete:** Definition, properties and applications.
4. **Stones:** Definition, types, properties and uses.
5. **Wood and Timber:** Definition, types, properties, uses, availability, cost and defects.
6. **Steel and Metal:** Definition, types, properties and uses.
7. **Glass:** Definition, types, properties and uses.
8. **Plaster:** Definition, uses, defects, curing, repairing and finishing.
9. **Paints and Distempers:** Definition, types, properties and uses.
10. **Varnishes and Polishes:** Definition, types, properties and uses.
11. **Waterproofing Materials:** Definition, types, properties and uses.
12. **Floor Coverings**
  - a) Carpet and Rugs: Definition, types (handmade, machine made and handcuffed carpets), properties, uses and sizes.
  - b) Importance of carpets and rugs in interior décor: Functional and decorative values.
  - c) Resilient floor coverings: Importance, uses and selection criteria for decoration.
13. **Wall Treatment:** Wall coverings with different materials viz; plaster, boards, painting, tiles, and wallpapers.
14. **Draperies, Curtains & Window Coverings:** Definition, importance, styles (café, sheer, lace, gathered, bishop sleeve), top treatments ( tabbed top, shirred, pinch pleat, pencil pleat, goblet pleat, box pleat and grommet), decorative treatments ( swag, cascade, jabot. Scarf and valance), shades and blinds, types of shades (balloon, cellular, festoon, roller, roman and blinds), pelmets and cornices.

**15. Innovative Materials-** survey and sample board of any 10 materials as per the industry demand.

**NOTE**

1. Samples for each of the above may be collected and demonstrated/exhibited to the students during the course of the lectures
2. Students should be instructed to collect these samples and maintain their own record through a scrap book containing brochures samples/sample board etc.
3. Survey and collection of samples of various types of woods such as deodar, kail, partal. Teak, mango, shesham etc.

**SUGGESTED DISTRIBUTION OF MARKS**

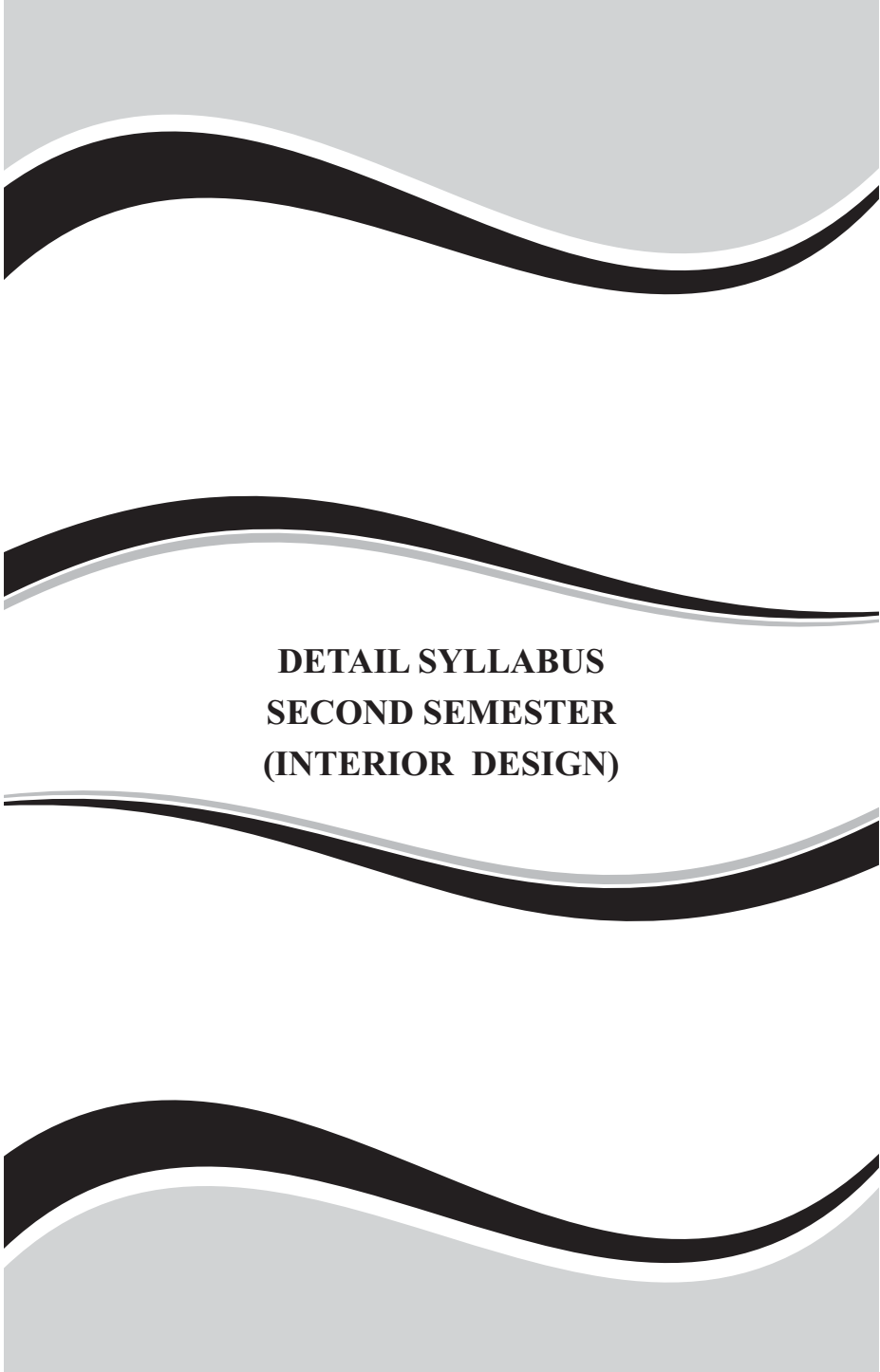
Topic No.	Period Allotted (Hrs)	Marks Allotted (%)
1	07	6
2	07	6
3	07	6
4	07	6
5	07	6
6	07	6
7	07	6
8	07	6
9	07	6
10	07	6
11	07	6
12	10	10
13	08	8
14	10	10
15	07	6
<b>Total</b>	<b>112</b>	<b>100</b>

**RECOMMENDED BOOKS**

1. Engineering Materials by Rangawala
2. Engineering Materials by Surrender Singh

**Note:** The study should be supported by market survey of materials with brands, sizes, rates and availability. An exercise should be conducted to take the students to exhibitions and make them aware of new materials being launched in market and let them prepare a brief report on the application of new materials and understand how to chose a material for a specific purpose after evaluating its availability, cost, performance and elegance etc.





**DETAIL SYLLABUS  
SECOND SEMESTER  
(INTERIOR DESIGN)**



## ENGLISH AND COMMUNICATION SKILL - II

Subject Code : 992001

L	T	P
3	1	2

### COURSE OUTCOME

After completing this course, the learner will be able to acquire all the four areas of language learning –listening, speaking, reading, writing. While reading and writing skills are parts of theory component, listening and speaking skills will be transmitted through lessons in the practical component. Understanding skills, on the other hand, shall be gained both in theory and practical sessions .

Learning objectives in different areas are defined as follows:

#### I. Reading Skills:

After completing this course, the learner will be able to read and comprehend texts from simple to moderate levels of difficulty

#### II. Writing Skills:

After completing this course, the learner will be able to

- Write simple to moderately complex sentences.
- Develop a simple idea into a short paragraph.
- Write business and personal letters at a functional level.
- Write specific formats like circulars, notices, press release, memo, agenda and minutes, e-mail, resume.

#### III. Listening Skills:

After completing this course, the learner will be able to listen and understand

- The spoken communication of fellow workers.
- News broadcast on TV and Radio.
- Lectures available on the internet.
- Films and shows in theatres and on TV.

#### IV. Speaking Skills:

After completing this course, the learners will be able to communicate ideas with moderate fluency of speech to their fellow-listeners, using moderately correct speech forms and pronunciation so as to be understandable to a mixed English-speaking audience.

**V. Understanding Skills:** After completing this course, the learners will be able to interpret the common and technical conversation in the language.

### **Methodology of Revision**

Among the five skills listed in the Objectives of the Course, the two skills of Listening and Speaking will be part of practical classes, and will also be tested through Practical Examination. The two skills of Reading and Writing are exclusively the theoretical part of the Course. The fifth skill of Understanding has both theoretical and practical components.

All the five skills are to be taught in both the Semesters. The basics of each component will be covered in Semester I, and relatively advanced topics to be covered in Semester II.

### **Theory**

**Total Marks 40%**

**1. Literature:** Fiction and Poetry. Fiction and Poetry are equally part of the reading regimen of any educated person. The lessons are to be equally divided among Indian and English authors. There will be three stories and three poems, six lessons in all. Suggested pieces/authors are: Fiction - Ruskin Bond, R K Narayan; Poetry: Shakespeare, Keats, Tagore

**2. Unseen Comprehension Passage:** Passages from stories and poems appearing in popular newspapers and magazines.

### **Language and Writing Skills: Advanced Specific writing skill Total Marks: 30%**

- a) Notice
- b) Circulars
- c) Memo
- d) Agenda for a Meeting
- e) Minutes of the Meeting
- f) Press Release
- g) E-Mail
- h) Resume

### **Communication Skills**

**Total Marks: 30%**

#### **1. Barriers to Communication**

- a) Barriers on the part of Sender
- b) Barriers on the part of Receiver
- c) Organisational and other barriers

#### **2. Listening as a Tool of Communication**

- a) Importance of Listening and Empathy



- b) Common Faults in Effective Listening
  - (1) Listening versus Hearing
  - (2) Poor Listening Habits
- c) Improving Listening Skill
- d) Humour in communication

**ECS SYLLABUS  
SEMESTER - II THEORY**

**I. Reading Skills: (16 Periods)**

**A Literature: Fiction and Poetry**

- 1. Ruskin Bond : The Prospect Of Flowers
- 2. R K Narayan : An Astrologer's Day
- 3. Shakespeare : Let Me Not To The Marriage of True Minds ( Sonnet No. 116)
- 4. John Keats : Ode To A Nightingale
- 5. Tagore : Thou Hast Made Me Endless (Verse-I Gitanjali)

**B Unseen Comprehension Passage.** Passages from stories and poems appearing in popular newspapers and magazines.

**II. Language and Writing Skills: Advanced (20 Periods)**

**Specific writing skills**

- a) Notice
- b) Circulars
- c) Memo
- d) Agenda for a Meeting
- e) Minutes of the Meeting
- f) Press Release
- g) E-Mail
- h) Resume

**III. Communication Skills (12 Periods)**

**1. Barriers to Communication**

- a) Barriers on the part of Sender
- b) Barriers on the part of Receiver
- c) Organisational and other barriers

## **2. Listening as a Tool of Communication**

- a) Importance of Listening and Empathy
- b) Common Faults in Effective Listening
  - (1) Listening versus Hearing
  - (2) Poor Listening Habits
- c) Improving Listening Skill
- d) Humour in communication

### **SEMESTER - II PRACTICAL (Listening, Speaking and Communication Skills)**

#### **A. Interviews**

##### **1. Job Interviews**

- a) Stages of Interview
- b) Face-to-face Interviews: Campus and On Site
- c) Telephonic Interview

##### **2. Media Interviews**

##### **3. Press Conference**

#### **B. Discussions**

1. Introducing Oneself and Others
2. Leading and Directing Discussions
3. Expressing Opinions and Ideas
4. Expressing Agreement / Disagreement
5. Raising Questions

#### **C. Group Discussions**

1. Speaking in a Group Discussion
2. Discussing Problems and Solutions
3. Using Persuasive Strategies
4. Turn Taking Strategies
5. Effective Intervention
6. Reaching a Decision

#### **D. Organisational GD**

1. Brainstorming

2. Nominal Group Techniques
3. Delphi Technique
4. GD as Part of a Selection Process

**E. Debate**

1. Art of Debating
2. Debating Local Issues
3. Debating National Issues
4. Debating International Issues

**F. Watching a Film / Visual Presentation**

1. Summarizing the Film / Visual Presentation
2. Critically Appreciating the Main Points
3. Leading a Further Discussion and Debate

**SUGGESTED DISTRIBUTION OF MARKS**

Unit no.	Period Allotted for lectures and Tutorials (Periods)	Marks allotted (%)
1	16	35
2	20	40
3	12	25
<b>TOTAL</b>	<b>48</b>	<b>100</b>

**Reference/text Book**

1. Developing Communication Skills By Krishna Mohan & Meera Banerjee (Trinity Press, New Delhi)
2. Communication Skills By Sanjay Kumar And Pusph Lata (Oxford Univ Press, New Delhi).
3. Wren & Martin High School English Grammar & Composition (S. Chand, New Delhi).
4. English & Communication Skills-1 By Vinit Kumar (Book World, Dehradun)
5. Communication Effectively In English, Book-1 By Revathi Srinivas, Abhisekh Publications, Chandigarh.
6. High School English Grammer And Composition By Wren & martin, S. chand Publication & Company Ltd. Delhi.
7. Communication Technics And Skill By R.K. Chadha; Dhanpat Rai Publications, New Delhi.

## ENVIRONMENTAL SCIENCE AND ENERGY MANAGEMENT

Subject Code : 992005

L	T	P
3	-	-

### RATIONALE

The importance of environment science cannot be disputed. The need for sustainable development is a key to the future of mankind. A diploma holder must have knowledge of different types of pollution caused due to industries, constructional activities and agricultural inputs so that he may help in balancing the ecosystem and controlling pollution by pollution control measures. He should also be aware of various social issues on environment and environment laws related to the control of pollution.

One of the reasons for India not been able to catch up with the desired extent of modernization of industrial processes in light of challenges posed by multinationals is the non-availability of required energy supply. The solution primarily lies in tapping all possible energy generation sources and efficient use of available energy important. Energy management focuses on these aspects. This course will develop awareness amongst the diploma engineers and will enable them to practice the energy management techniques in whatever field they are engaged in.

### DETAILED CONTENTS

#### Unit 1 :- Environment, Ecosystem and Natural Resources. (11 Periods)

- Definition of Environment.
- Scope of Environment.
- Effects of Environment on human life.
- Concept of ecosystem.
- Components of ecosystem.
- Structure of ecosystem.
- Function of ecosystem.
- Aspects, Methods, objectives and principle of sustainable Development.
- Water and forest resources.

#### Unit :- 2 Environmental Pollution, Social issues and the Environment.

(12 Periods)

- Air pollution
- Water Pollution
- Soil Pollution

- Marine pollution
- Noise pollution
- Thermal pollution
- Solid waste Management : Nature of wastes, Disposal methods, waste-to-energy, Industrial waste.
- Role of an individual in prevention of pollution.

**Unit 3 :- Social Issues and Environment (10 Periods)**

- Water conservation, rain water harvesting, water shed management.
- Climate change, global warming, acid rain, ozone layer depletion.
- Disaster management.
- Green Building Technology
- Environment Protection Act.
- Air (prevention and control of pollution) Act.
- Water (prevention and control of pollution) Act.
- Role of Organic farming, bio-fertilizers and bio-pesticides in environment protection.

**Unit 4 :- Energy Conservation efficiency and energy Audit (10 Periods)**

- Energy Conservation and objectives.
- Energy efficiency.
- Energy Conservation in lighting arrangement and appliance used in domestic sector.
- Needs for energy efficient devices.
- Energy efficient motors.
- How to maximize the efficiency of equipments.
- CFL and LED lamps.
- Needs of energy audit.
- Energy Audit methodology.
- About bureau of Energy efficiency and its scheme.

**Unit 5 :- Renewable Energy (5 Periods)**

- Introduction.
- Types of Renewable Energy source.
- Electric vehicle

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Period Allotted for Lectures (Periods)	Marks Allotted (%)
1	11	20
2	12	25
3	10	20
4	10	25
5	5	10
<b>Total</b>	<b>48</b>	<b>100</b>

#### Recommended Books :

- Fundamental concept in Environmental Studies, D D Mishra, S Chand & Co Ltd.
- Environmental Science by Deswal and Deswal, Dhanpat Rai and Sons Ltd.
- Handbook of Organic farming by P.D. Gera, Abhishek Publications, New Delhi.
- Environmental studies by Daniel, Wiley India.
- M Ajni Reddy, Text book of Environmental Science, BS Publication, Hyderabad.
- Manual on Energy Efficiency at Design Stage, CII Energy Management Cell
- Manual on Energy Efficiency in Pumping System, CII Energy Management Cell
- Manual on Variable Speed Drives for Energy Efficiency CII Energy Management Cell
- Energy Conservation-case studies in ceramic industry, sugar industry, fertilizer industry, cement industry, CII, Energy Management Cell etc.

## APPRECIATION OF DECORATIVE DESIGN

Subject Code : 132002

L	T	P
4	2	-

### RATIONALE:

A true designer must be able to understand and appreciate the works of his earlier designers and his contemporary ones. It adds to his perceptions and enriches him with the new thoughts. The paper aims to inculcate this ability in the designers.

### DETAILED CONTENTS

- 1. TRADITIONAL INDIAN DESIGNS:** Designs and motifs used on surfaces and objects including pottery, stone and metal ware, wood crafts, carpets, textiles, lamps and other handicrafts. Study and sketch from museums and other sources and development of creative designs and based on study and research. **(24 Periods)**
- 2. CONTEMPORARY INDIAN DESIGNS AND MOTIVES:** Designs and motifs used in carpets, textiles, lamps, vases, handicrafts, wood, stone and metalware.  
**VISITS:** To sources like emporia, specialized stores, etc. **(24 Periods)**
- 3. INDIAN FOLK DESIGNS:** Folk designs and motifs used on walls, floors and utility objects, such as Madhubani, Warli, Pattachitra, kalamkari, Bidri work, Sankheda, etc. **(24 Periods)**
- 4. DECORATIVE DESIGNS:** On the basis of composition, colour, pattern and texture, exercises should be given in making decorative designs of murals, wall paper, posters, textiles, carpets, wall hanging, etc. Motifs and Patterns of Historical, National, Regional, Seasonal and Festival importance are to be considered. Study of inlay and meenakari in relation to interiors. **(24 Periods)**  
**VISITS:** To sources, museums, art galleries and constructional sites, etc.

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Period Allotted (Hrs)	Marks Allotted (%)
1	24	25
2	24	25
3	24	25
4	24	25
<b>Total</b>	<b>96</b>	<b>100</b>

## INTERIOR DESIGN-I

Subject Code : 132003

L	T	P
3	-	10

### Rationale

To explore the creativity and the visualisation of the students while introducing them to the Design problem. Thus particular course aims at preparing the students to initiate their designing skills.

### Design Statement

Concept and design of Residential space.

### Evolution of design

Introduction to the Interior Design problem.

#### Step 1

3-d Block Models in any material

(09 Periods)

#### Step-2

Make a composition (with or without maintaining geometrical identity) (in 3D)

(09 Periods)

#### Step-3

After finalising the composition , use any three different materials texture on surfaces of the composition.

(09 Periods)

#### Step- 4

Now make a plan of this obtained model.

(09 Periods)

#### Step-5

Now prepare a layout plan for the design scheme of a Residential interior as per their own requirement.(min area to be designed 40 sq m)

(12 Periods)

### Requirements:-

#### 1. Models:-

- 1.1 Block model
- 1.2 Block model with different materials
- 1.3 Interior Model with block furniture

2. Top view of the obtained space
3. Plan at eye level
4. Furniture layout plan of the space



5. Sectional elevations at least three
6. 3-D View -01 no.

**RECOMMENDED BOOKS**

1. Times Savers Standards
2. Periodicals and Magazines
3. Interior Design - K. Vasu

**SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Period Allotted (Hrs)</b>	<b>Marks Allotted (%)</b>
1	09	18
2	09	18
3	09	18
4	09	18
5	12	28
<b>Total</b>	<b>48</b>	<b>100</b>

## BUILDING CONSTRUCTION-I

Subject Code : 132004

L	T	P
3	-	10

### 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

1. **Foundation :** Introduction, Types of foundation-Brick, R.C.C., Raft and Pile  
(Two Sheets)
2. **Components of building:** section through external brick wall  
(One Sheet)
3. **Brick Masonry :**
  - a) English and Flemish bonds. (Two Sheets)
  - b) Decorative brick work (wall elevation) (One Sheet)
4. **Stone Masonry:**
  - a) Ashlar and Rubble masonry. (Two Sheets)
  - b) Decorative stone work (wall elevation) (One Sheet)
5. **Openings:**
  - a) Arches- Introduction and their types. (Two Sheets)
  - b) Lintels- Introduction and their types. (One Sheet)
  - c) Doors- Introduction, types of doors and their closing devices viz. Simple, Glazed, Panelled, Fly-proof, flush door, Glazed and Panelled, Sliding, Swing doors in Wood and Metals. (Eight Sheets)
  - d) Window- Introduction and their types viz., Bay window, Corner window, Dormer window, Casement Window, Sliding Window, Sky light and Ventilators in Wood and Metals. (Six Sheets)

6. **Paneling:** Introduction and Paneling in plywood, PVC and wooden tiles showing fixing details. (One Sheet)

**Total sheet to be made=27 (at least)**

**Note:**

1. Relevant theory should be taught along with practical exercises.
2. Relevant site visit to explain the various topics, must be carried out to add to the practical knowledge of the students.

**SUGGESTED DISTRIBUTION OF MARKS**

Topic No.	Period Allotted (Hrs)	Marks Allotted (%)
1	7	15
2	7	15
3	8	15
4	7	15
5	12	25
6	7	15
<b>Total</b>	<b>48</b>	<b>100</b>

**Recommended books**

1. Building construction by Sushil Kumar, VB Sikka and Barry







**LEARNING OUT COMES**  
**INTERIOR DESIGN - 1<sup>ST</sup> Year**

Sr.	Title of Subject/Unit	Learning Outcomes to be	Means of Assessment
1	English and Communication Skills	Communicate effectively in English with others.	Assignments and quiz/class tests, mid-term and end-term written tests, model/ prototype making Actual laboratory and practical work, model/prototype making, assembly and disassembly exercises and viva-voce Report writing, presentation and viva-Voce.
2	Computer Fundamentals	Use computer and IT tools for creating document, making spread sheet and making presentation.	Assignments and quiz/class tests, mid- term and end-term written tests, model/prototype making Actual laboratory and practical work, model/prototype making, assembly and disassembly exercises and viva-voce Software installation, operation, development and viva-voce
3	Basic Design and Modelling	1. Able to apply Anthropometry, elements and principles of interior design in interior projects. 2. Able to make scaled block/ interior models using cutting tools and equipments.	1. Drawings and models 2. Analysis of various jobs and models
4	Arts and Graphics	Able to Read, Draft and Render the drawings	Drawings, Drawings, Class test, Mid-term
5	Material for Interior Design	Able to select the appropriate interior /exterior materials as well as finishing and furnishing materials for a given interior project.	Seminar, sample board , Assignments, Class test, Mid-term
6	Environmental Science & Energy Management	Use appropriate procedures for energy conservation and preventing environmental pollutions.	Assignments and quiz/class tests, mid-term and end-term written tests, model/prototype making
7	Appreciation of Decorative Design	Able to select and use Traditional/ Contemporary motifs and handicrafts in interior design.	Assignments, Report, Class test, Mid-term

Sr.	Title of Subject/Unit	Learning Outcomes to be	Means of Assessment
8	Interior Design	Able to design and draft a complete interior project.	Drawings, Model/s, Report writing, Presentation, Mid-term, Viva-vice, Jury
2	Building Construction	Able to draft detailed construction drawings.	Drawings, Class test, Mid-term

