

1.1 COMMUNICATION SKILLS - I

L T P
3 - 2

RATIONALE

Language is the most commonly used and effective medium of self-expression in all spheres of human life – personal, social and professional. A student must have a fair knowledge of English language and be able to pursue the present course of study and handle the future jobs in industry. The objective of this course is to assist the diploma holders to acquire proficiency, both in spoken (oral) and written language. At the end of the course, the student will be able to develop comprehension, improve vocabulary, develop grammatical ability, enhance writing skills, correspond with others and enhance skills in spoken English.

DETAILED CONTENTS

1. Prose Text Book (12 hrs)

The following six chapters of “A Book of English for Polytechnics – Prose Selection” published by MacMillan India Ltd., on behalf of Technical Teachers’ Training Institute, Chandigarh

- a) Adventure in Space
- b) An Engineering Wizard
- c) The Diamond Necklace
- d) God lives in the Panch
- e) The Man who found penicillin
- f) Guru Nanak Dev

There will be one general question from one of these six chapters.

2. Comprehension (from the prescribed 6 chapters of Prose Text Book and simple unseen passages) (4 hrs)

3. Grammar (from the prescribed 6 chapters of Prose Text Book only) (10 hrs)

- Prepositions
- Correction
- Voice
- Narration
- Punctuation
- Tenses
- Correction of incorrect sentences

4. Vocabulary (6 hrs)
- Words, idioms, phrases, antonyms and synonyms
 - Translation of 300 most commonly used scientific and technological terms in Hindi to English and English to Hindi
5. Translation and Re-Translation (individual simple sentences) (10 hrs)
- English to Hindi and Hindi to English
6. Paragraph writing on current topics/themes (6 hrs)
- Technology
 - Science
 - Economy
 - Political
 - Social
 - General

LIST OF PRACTICALS

1. How to locate reading material in the library?
2. How to look up words in a dictionary?
3. How to look up information from an encyclopedia?
4. Acquaintance with 44 sounds of pronunciation
5. Introducing self and others
6. Paper reading
7. Group Discussions
8. Seminar presentation on a given topic/theme
9. Declamation contest

Note: For reading comprehension, listening comprehension and effective speaking skills, English Language Laboratory Manual and Workbook published by State Board of Technical Education, Hyderabad may be used along with text-book

RECOMMENDED BOOKS

1. Essentials of Business Communication by Pal and Rorualling; Sultan Chand and Sons
2. The Essence of Effective Communication, Ludlow and Panthon; Prentice Hall of India
3. New Design English Grammar, Reading and Writing Skills by AL Kohli (Course A and course B), Kohli Publishers, 34 Industrial Area Phase-II, Chandigarh,
4. New Design English Reading and Advanced Writing Skills for Class XI and XII by MK Kohli and AL Kohli; Kohli Publishers, 34 Industrial Area Phase-II, Chandigarh,
5. A Practical English Grammar by Thomson and Marlinet
6. Spoken English by V Sasikumar and PV Dhamija; Tata McGraw Hill
7. English Conversation Practice by Grount Taylor; Tata McGraw Hill
8. Developing Communication Skills by Krishna Mohan and Meera Banerji; MacMillan India Ltd., Delhi
9. Business Correspondence and Report Writing by RC Sharma and Krishna Mohan; Tata McGraw Hill Publishing Company Ltd. New Delhi
10. Communication Skills by Ms R Datta Roy and KK Dhir; Vishal Publication, Jalandhar

1.2 DRAWING AND RENDERING - I

L T P

- - 4

RATIONALE

Diploma holders of textile design are required to draw various forms of objects from their surroundings and nature from design point of view e.g flowers, leaves, fruits, plants, monuments etc. The translation of ideas into practice without the use of this graphic language is really beyond imagination. The students are supposed to go for outdoor sketching, also to the museums, gardens and monuments so that they can use various shapes, colours and textures in their designs.

DETAILED CONTENTS

Related theory for Practical Exercises	Practical Exercises
1. Understanding of different shapes of objects, opaque and transparent objects, glazed and rough surface; objects and use of different mediums	1.1 Draw different shaped objects like round (pot, kettle, ball etc), square (match box, duster, big and small boxes) and do them in the following medium by pencil shading
2. Study of Drapery	2.1 Different folds of drapery may be studied with any back ground by pencil shading
3. Memory Drawing	3.1 Students may be asked to draw the above from memory

Note:

1. **Students should be taken out for field visits, museums, exhibitions, market, etc for clarifying the concepts and principles of this course as per requirement.**
2. **There will be only a practical paper in this subject. The knowledge attained by students regarding related theory for practical exercises will be evaluated in the form of viva-voce during practical examinations.**

RECOMMENDED BOOKS

1. How to draw and paint by A Walter foster; published by E.D. Galgotia and sons.
2. Flowers and still life by A Walter foster; published by E.D. Galgotia and sons.
3. How to draw and paint textures of animals by A Walter foster; published by E.D. Galgotia and sons.

1.3 BASIC DESIGN - I

L T P

- - 4

RATIONALE

Diploma holder of Textile Design are supposed to know the concepts of construction of designs in various styles by using various techniques according to the suitability of various kinds of fabrics on paper with colours. Students are given understanding of all elements and concepts of design through various exercises. They are also taught use of different tools and art-materials

DETAILED CONTENTS

Related theory for Practical Exercises	Practical Exercises
1. Basic elements of drawing and design; and understanding of principles of designs – Rhythm, balance, harmony, unity, emphasis, proportion, colour combination etc to form a good design	1.1 Teacher will illustrate and discuss the basic concepts of drawing and design with the help of pictures, paintings, designs etc which help the students to create suitable and perfect designs according to requirement
2. Introduction to tools and art-material	2.1 Teacher will teach students to handle each instrument and various art-materials 2.2 Students will do simple exercises for handling T-square, set-square, scale, liner, compass liner, etc with black pencils of various numbers (HB, 2B, 4B, 6B) and black ink
3. Understanding of construction of designs by using basic elements of drawing i.e. 'dot' and 'line'	3.1 Students will make motifs by using various types of liner, horizontal, vertical, diagonal, zigzag, curve, spiral, etc in various styles – (thick, thin, dashed, dotted etc.) in the following mediums) a) Black pencils (HB, 2B, 4B, 6B) b) Coloured Inks (Sketch pens) c) Poster colours
4. Understanding of construction of designs by using basic geometrical shapes	4.1 Students will make motifs with the help of basic geometrical shapes – circle, square, triangle, rectangle, etc in the following mediums a) Coloured inks b) Poster Colours

Instructions for Practical Exercises	Practical Exercises
5. Construction of designs with various basic shapes to understand the concept of space organization	5.1 Students will make motifs of designs with various basic shapes (geometrical/free hand) in various small and big sizes in the following mediums a) Coloured papers/glazed papers b) Postal papers c) Black papers d) Brown papers
6. Exploration and experiment with liner and compass liner	6.1 Students will make motifs directly using liner and compass liner only with medium coloured inks or postal colours
7. Understanding of 3-dimensional effects in design	7.1 Students will make motifs by using basic shapes with tonal effects in the following mediums a) Black pencils (HB, 2B, 4B, 6B) b) Pencil colours/Postal colours
8. Understanding of Texture Effects	8.1 Students will make motifs by using various shapes with variations of texture effects in the following mediums: a) Black pencils (HB, 2B, 4B, 6B) b) Water colours/Postal Colours/Inks

Note: Students should be taken for field visits, museums, exhibitions, market, etc for clarifying the concepts and principles of this course as per requirement. There will be only practical paper in this subject. The knowledge attained by students regarding related theory for practical exercises will be evaluated in the form of viva-voce during practical examinations.

RECOMMENDED BOOKS

1. The Encyclopaedia of Patterns and Motifs by Dorothy Bosomworth; Studio London
2. Designer's Guide to Colour 3 by Jeanne Alen; Chronicle Books, San Francisco
3. Fabric Painting by Jill Kennedy and Jane Varsall; BT Batsford Ltd., London
4. Designer's Guide to Japanese Patterns by Jeanne Allen; Chronicle Books, San Francisco

5. Handwoven Fabrics of India by Jasleen Dhamija and Jyotindra Jain; Mapin Publishing Pvt. Ltd., Ahmedabad
6. Impression - A Classic Collection of Textile Design by K Prakash; The Design Point, B-7, Shiv Krupa Apartments, Old Nagaradas Road, Andheri (E) Bombay 400 069 (India)
7. Textile Designs- Idea and Applications by Joel Sokoelov; PBC International, Inc., New York
8. History of Textile Design by VA Shenai; Sevak Publications, Bombay 400 031
9. Fabric Art Heritage of India by Sukla Dass; Abhinav Publications
10. Fabric Painting Made Easy by Nancy Ward; Craft Kaleidoscope, Chilton Book Company, Radnor, Pennsylvania
11. Watson's Textile Design and Colour by Z Grosicki; Universal Publishing Corporation, Bombay (India)
12. Textile Designs- 200 years of Patterns for Printed Fabrics Arranged by Motifs, Colours, Period and Design by Susan Maller and Joost Elffers; Thames and Hudson
13. English and American Textiles from 1790 to the Present by Mary Schoeser and Celia Rufey; Thames and Hudson

1.4 COLOUR AND TEXTURE - I

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RATIONALE

Diploma holders of Textile Design should know the basics of colour theory, to enhance the beauty of design. Colour plays a vital role in design. With various mediums like coloured inks, crayon, water colours and poster colours etc, they are taught to create colour mixing, colour combinations and texture, creating various tonal effects

DETAILED CONTENTS

PRACTICAL EXERCISES

1. Introduction and demonstration of Colour Theory
2. Rainbow Colours: Make a chart of VIBGYOR colours
3. Prepare Charts of classification of following colours
 - i) Primary Colours: (red, yellow and blue) in various geometrical shapes
 - ii) Secondary colours: Orange, green and violet in circles
 - iii) Sub secondary tertiary colours: by mixing secondary and primary colours
4. Colour Wheel (chromatic circle): Make a wheel showing primary, secondary, sub secondary intermediate colours
5. Achromatic Colours: Make a composition of different geometrical shapes in 12"x12" and paint it with achromatic colours giving it as many colours as possible.
6. Monochromatic Colours: Make a composition of floral designs in different blocks using as many shades of monochromatic colours as possible
7. Polychromatic Colours: Make a composition of abstract designs and fill it with polychromatic colours
8. Analogous Colour: Make a floral design showing analogous colour scheme
9. Methods of Modification of colours: Students will produce various colours by mixing different colours in different ratios e.g. yellow + blue = green

Note: Mixing and developing of different colour shades may be shown on computer so that the students are able to appreciate the importance of the subject

RECOMMENDED BOOKS

1. Computer Colour-10,000 computer - Generated Process colours by Michael and Pat Rogondino; Angus and Robertson Publishers (Practical reference of colours Processed by Mixing)
2. Colour in Theory and Practice by HD Murray; Chapman and Hall Ltd., 37 Essex Street, WC 2, London 1952
3. An Introduction to Colour by Ralph M Evans; London Chapman and Hall Ltd.
4. Designer's Guide to Colour 1, 2, 3, 4, 5, 6 by Ikuyashi Shibukawa and Yum Takahashi; Chronicle Books, San Francisco
5. Colour Harmony- A guide to Creative Colour Combinations by Hideaki Chijiwa, Professor Musashino College of Art; India Book Distributors
6. Variety Fashion for Freedom by SA Huisain; Trends Today, Bombay, India
7. The 4 - Colour Person by Dr Max Luscher; Simon and Schuster
8. The Colour Handbook how to Use Colour in Commerce and Industry by EP Danger; Gower Publishing Company, Old Post Road, Brookfield Vermont 05036, USA

1.5 INTRODUCTION TO TEXTILE PROCESSES - I

L T P
3 - 4

RATIONALE

The students of textile design are supposed to have introductory knowledge and skill related to various fibres, yarns and fabrics. Thus in this subject students learn different fibres, yarns and fabrics and their manufacturing techniques.

DETAILED CONTENTS

Theory	Practical Exercises
1. Definition of fibre, yarn, fabric, classification of textile fibres and physical and chemical identification of textile fibres (9 hrs)	1.1 Physical and chemical identification of different types of fibres: cotton, wool, silk, nylon, acrylic, polyester, viscose only
2. Source and production of cotton, wool, jute silk fibres their end uses and properties (10 hrs)	
3. Cotton, wool, silk, Viscose rayon, nylon, polyester, acrylic polypropylene fibres; their uses and properties (12 hrs)	3.1 Qualitative and quantitative analysis of fibres and their blends
4. Grading of cotton and wool, staple fibre, filament and filament yarn (8 hrs)	4.1 Study of fibre cross section of cotton, wool, nylon, polyester, silk
5. Definition of moisture content, moisture regain, absolute humidity, relative humidity, their relationship, effects of moisture on fibres (9 hrs)	

Note: The student may be exposed to different types of textile manufacturing processes through textile mill visit so that they are able to understand the subject properly.

RECOMMENDED BOOKS

1. Textile Fibre by Ghol and Valanslk
2. Yarn to Fabric by Peter Schwarz
3. Fibre to Fabric by BP Corbman
4. Textile Fibres and their processings by KP Hess
5. Elementary Textile By Parul Bhatnagar; Abhishek Publisher, Chandigarh

1.6 STRUCTURAL FABRIC DESIGN - I

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RATIONALE

The students of textile design are supposed to have knowledge and skill regarding various weaves and their construction. Hence, in this subject, students will learn different weaves, their method of employment to acquire competency for production of woven designs for different end uses.

DETAILED CONTENTS

(THEORY)

1. Introduction to fabric structure, explanation of woven structures and other fabric structures for example knitted, non-woven, bonded and embroidery, crochet and needle work (8 hrs)
2. Definition of warp and weft, ends and picks, design, repeat of a design, crochet, needle work, draft, lifting or peg plan and denting order (7 hrs)
3. Types of drafts and their uses in the manufacture of various fabrics (5 hrs)
4. Construction of weaves on point or graph paper in relation of draft, design and peg plan (Mill visit) (7 hrs)
5. Construction of plain weave and its derivatives in the form of simple matt or hopsack and ribbed structure (6 hrs)
6. Varigated hopsack or matt weave designs with warp face, weft face and reversible effects. Ornamentation of plain weave by different methods (5 hrs)
7. Construction of Twill weaves and their derivatives (10 hrs)
 - 7.1 Regular twills
 - 7.2 Pointed twills
 - 7.3 Broken twills
 - 7.4 Combined twills
 - 7.5 Fancy twills

PRACTICAL EXERCISES

Following weaves to be constructed on Graph Paper

1. Construction of Plain weave
 - Rib weave - regular and irregular
 - Cord weave - regular and irregular
 - Hopsack weave

2. Construction of Twill weave
 - Warp faced twill
 - Weft faced twill
 - Reversible twill

3. Preparation of samples of plain and twill weave
 - (a) Napkin
 - Theme combination of basic weaves
 - Method Hand loom
 - Placement checks or stripes
 - Colour scheme two colour for warp and two colour for weft

 - (b) Floor Weaving
 - Theme Durrie weave
 - Placement Geometrical design with the help of cup shuttle process at Horizontal strips
 - Warp - grey yarn count 2/4
 - Weft - Cotton Jute, Coir, wool

4. Identification of fabrics structures regarding weaving, knitting, crochet, embroidery, needle work etc.

5. Drafting and denting of warp for weaves studied in theory

Note: Concept of different weaves should be made clear with the help of samples and bobbin samples so that the students are able to identify different weaves in the fabric samples

RECOMMENDED BOOKS

1. Grammer of Textile Design – Nisbet
2. Structural Fabric Design by – Kilby
3. Woven Structures and Design – Doris Goerner; British Textile Technology Group WIRA House, Leeds (UK)
4. Fibre to Fabric by Ghosh
5. Watson's Advance Textile Design
6. Watson's Textile Design and Colour

1.7 ART APPRECIATION IN INDIAN TRADITIONAL TEXTILE DESIGN - I

L T P
3 - 2

RATIONALE

Diploma holders of textile design are supposed to know the historical backgrounds of Indian traditional textiles i.e. woven, printed and embroidered and their development of design, fabric uses and technical details. In practical, students learn to prepare replicas, for which they should visit art galleries and museums

DETAILED CONTENTS

Theory	Practical Exercises
<p>1. Study of Indian embroidered textiles with reference to textiles with reference to</p> <ul style="list-style-type: none"> - Historical significance - Construction techniques - Styles - Textures, colour and - Motifs - Centres of production <p>a) Different Kashmir embroidery b) Panjabi Phulkari c) Himachal – Chamba Rumal d) Bihar and Bengal Suzni Kantha e) UP – Chikan Kari f) Orissa – Applique work g) Karnataka – Kasuti h) Gujrat and Rajasthan – Block Printing i) Saree of India – embroidered (28 hrs)</p>	<p>1.1 Replication of designs (2 to 4 designs each)</p> <p>1.2 Assignments to students on designs</p> <p>1.3 Presentation of assignments</p> <p>1.4 Any one or more styles of embroidery to be executed</p>
<p>2. Study of Woven textiles with reference to:</p> <ul style="list-style-type: none"> - Historical significance - Construction techniques(Including raw materials) - Styles, colour and motifs - Centres of production <p>(a) Shawls (b) Brocades – Banaras, south Indian, Baluchar, Pathani (c) Tangail – Jamdani (d) Eastern region (e) Sarees of India - woven (20 hrs)</p>	<p>2.1 Replication of designs (2 to 4 designs each)</p> <p>2.2 Assignments to students on designs</p> <p>2.3 Presentation of assignments</p>

Note: Students should be taken for field visits to various production centres to show the samples of the above mentioned textiles (embroidered, woven, printed and dyed) They may also be taken for field visits to various places like art galleries/museums/religious places

Practically execute any one of the traditional designs in the contemporary form and prepare a file with replica or samples of the given topics

RECOMMENDED BOOKS

1. Folk Embroidery of Himachal Pradesh by Subhashini Aryan
2. Ikat Textile of India by Chetna Desai
3. Indian Painted Textiles by Kamla Dev Chattopadya
4. Carpets of India by Marq
5. Fabric Art heritage of India by Sukla Das
6. Hand Woven Fabric of India by Jasleen Dhamija
7. Indian Sari by Kamla Dev Chattapodya
8. Tie Dyed Textile of India by veronica Muarphy
9. Hand Woven Fabrics of India by Jasleen Dhamija
10. Traditional Indian Textiles by John Gillow
11. Textile Art of India by Kyoto Shoin
12. Hand Painting Textile For the Home by Kaszz Ball and Valcrie
13. Tie Dyed Textiles of India by Murphyd Crill
14. Masterpieces of Indian Textile by Rustam J Mehta
15. Kashmir Shawls by All India Handicrafts Board
16. Everything you ever wanted to know about Fabric Painting by Jill Kennedy and Jane Vourell
17. Saries of India – RTZ and Singh
18. Saries of Madhya Pradesh

19. Embroidered Textiles of India, Calico Masam of India
20. Painted Textiles of India, Calico Masam of India
21. Printed Textiles of India, Calico Masam of India
22. Woven Textile of India. Calico Masam of India
23. Costumes and Textiles of India by Parul Bhatnagar; Abhishek Publisher, Chandigarh