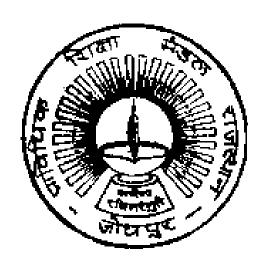
# GOVERNMENT OF RAJASTHAN BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

## **SEMESTER SCHEME-2020-21**

(SESSION 2021-2022 & ONWARDS)



## TEACHING AND EXAMINATION SCHEME AND SYLLABUS

## **TEXTILE DESIGN**

**(TD)** 

Curriculum Development Cell Board of Technical Education, Rajasthan W-6 Residency Road, Jodhpur

#### GOVERNMENT OF RAJASTHAN

#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

#### TEACHING AND EXAMINATION SCHEME

#### FOR DIPLOMA I SEMESTER (TEXTILE DESIGN)

SESSION 2020-2021& ONWARDS

Subject		Dis	tributi	on of T	<b>Time</b>		Distrib	ution of	Max. N	/Iarks/ D	uration	1	T-4-1	
Code	Subject	1	Hours p	er we	ek	En	d Semes	ster Exa	m.	Intern	al Asse	essment	Total Marks	Credits
Code		L	T	P	Tot	TH	Hrs.	PR	Hrs.	СТ	TU	PR(S)	Wai KS	
*TD 1001	Communication Skills in English-I	1			1	60	3	i	-	40			100	1.0
*TD 1002	Computer Applications-I	2			2	60	3			40			100	2.0
\$TD 1003	Introduction to Textiles-I	3			3	60	3	1		40			100	3.0
\$TD 1004	Fundamental Theory of Textile Design-I	1	-	-	1	60	3	i		40			100	1.0
\$TD 1005	Introduction of Textile Art and Craft Lab	ı		4	4		(	40	6	-		60	100	2.0
\$TD 1006	Sketching & Drawing-I Lab	-	-	6	6	-		40	6			60	100	3.0
<sup>\$</sup> TD 1007	Basics of Designing -I Lab	-	-	5	5		7.	40	6			60	100	2.5
*TD 1008	Communication Skills in English-I Lab			2	2			40	3			60	100	1.0
*TD 1009	Computer Applications-I Lab			3	3			40	3			60	100	1.5
\$TD 1010	Introduction to Textiles-I Lab	-		1	1	A	<b>/</b>	40	3			60	100	0.5
<sup>\$</sup> TD 1011	Fundamental Theory of Textile Design-I Lab	ı	-	5	5	\		40	6			60	100	2.5
*TD 1111	Anandam (Joy of Giving)	-		1	1	<b>)</b>						100	100	2.0
	Students Centered Activities	ı		2	2									-
	Total	7		29	36	240		280		160		520	1200	22.0
					_						Grand	l Total :	1200	22.0

1. L : Lecture

T : Tutorial

3. P : Practical

4. TH: Marks for End Semester Exam for Theory

PR: Marks for End Semester Exam for Practical

CT : Marks for class tests (Internal Assessment)

7. TU: Marks for tutorials (Internal Assessment)
PR(S): Marks for practical and viva (Internal Assessment)

1. \*TD 1001,\* TD 1002, \* TD 1008, \* TD 1009 and \*TD 1111 are same in all Branches of Non Engineering.

2 STD 1003, STD 1004, STD 1005, STD 1006, STD 1007, STD 1010 and STD 1011 are same FT 1003, FT 1004, FT 1005, FT 1006, FT 1007, FT 1010 and FT 1011 respectively

Two weeks Induction Programme for students to be offered right at the start of First Semester.

Induction Programme includes 1. Creative Arts 2. Universal Human Values 3. Literary 4. Proficiency Modules 5. Lectures by Eminent Persons 6. Visits to City / Nearby Industries 7. Familiarization to Department / Branch / Exhibition room.

Anandam (Joy of Giving): In addition to the practical of one hour every week, students will have to do activities at home and college after college hours.

Students Centered Activities include 1. Expert lectures/ practice sessions on technical topics of common interest 2. Personality development 3. Human values

4. Industrial visits 5.Art of living 6. Environmental issues 7. Quiz programs 8. Interview techniques 9. Greening and cleaning of campus etc.

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

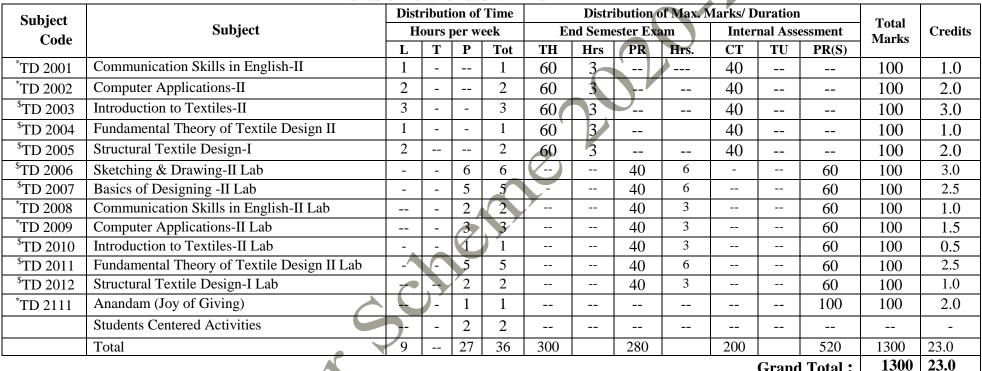
#### GOVERNMENT OF RAJASTHAN

#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

#### TEACHING AND EXAMINATION SCHEME

#### FOR DIPLOMA II SEMESTER (TEXTILE DESIGN)

SESSION 2020-2021& ONWARDS



1300 **Grand Total:** 

L : Lecture : Tutorial

P : Practical

: Marks for End Semester Exam for Theory

5. PR : Marks for End Semester Exam for Practical

CT : Marks for class tests (Internal Assessment) TU: Marks for tutorials (Internal Assessment)

PR(S) : Marks for practical and viva (Internal Assessment)

\*TD 2001, \*TD 2002, \*TD 2008, \*TD 2009 and \*TD 2111 are same in all Branches of Non Engineering.

2. STD 2003, STD 1004, STD 2005, STD 2006, STD 2007, STD 2010, STD 2011 and STD 2012 are same FT 2003, FT 2004, FT 2005, FT 2007, FT 2010, FT 2011 and FT 2012 respectively

Anandam (Joy of Giving): In addition to the practical of one hour every week, students will have to do activities at home and college after college hours.

Students Centered Activities include 1. Expert lectures/ practice sessions on technical topics of common interest 2. Personality development 3. Human values

4. Industrial visits 5. Art of living 6. Environmental issues 7. Quiz programs 8. Interview techniques 9. Greening and cleaning of campus etc.

8.

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

NOTE: Students will go for one month (24 Working Days) Summer Internship in the Summer Vacations after Second Semester. The Assessment of the Summer Internship will be done in Third Semester.

#### GOVERNMENT OF RAJASTHAN

#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

## TEACHING AND EXAMINATION SCHEME SEMESTER SCHEME-2020-21

#### FOR DIPLOMA III SEMESTER (TEXTILE DESIGN) (TD)

(SESSION 2021-2022& ONWARDS)

Subject		Dis	tribut	ion of T	Гіте		Dist	ributio	n of Max	. Marks	/ Duration		TD 4 1	
Code	Subject	F	Iours	per we	ek	En	d Seme	ster Ex	kam.	Inte	rnal Assess	sment	Total Marks	Credits
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi.	PR(S)	Wai KS	
*TD 3001	Environmental Studies-I	2			2	60	3		<del>(</del> )	20	20		100	2.0
TD 3002	Dyeing Technology -I	4			4	60	3	(	-	20	20		100	4.0
TD 3003	Structural Textile Design- II	4			4	60	3	-	)	20	20		100	4.0
TD 3004	Traditional Indian Textiles- I	4			4	60	3			20	20		100	4.0
TD 3005	Drawing and Rendering -I Lab			4	4			40	6			60	100	2.0
TD 3006	Computer Aided Textile Design- I Lab			4	4			40	3			60	100	2.0
TD 3007	Dyeing Technology -I Lab			3	3		4-	40	3			60	100	1.5
TD 3008	Printed Fabric Design- I Lab			4	4		į	40	6			60	100	2.0
*TD3009	Environmental Studies-I Lab			2	2		<b>7</b>	40	3			60	100	1.0
TD 3010	Traditional Indian Textiles -I Lab			2	2	, ,		40	6			60	100	1.0
TD 3011	Summer Internship-I (4Weeks after II Semester)					)′		100					100	2.0
TD3333	Anandam (Joy of Giving)			1	1							100	100	2.0
	Students Centered Activities		>	2	) 2									-
	Total	14		22	36	240		340		80	80	460	1200	27.5
											Gran	d Total:	1200	27.5

1. L : Lecture

2. T : Tutorial

P : Practical
 TH : Marks for End Semester Exam for Theory

5. PR : Marks for End Semester Exam for Practical

6. CT : Marks for class tests (Internal Assessment)

TU/Assi: Marks for tutorials/Assignment (Internal Assessment)
 PR(S): Marks for practical and viva (Internal Assessment)

\*TD3001, ,\*TD3009 and \*TD 3333 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

#### GOVERNMENT OF RAJASTHAN

#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

#### TEACHING AND EXAMINATION SCHEME

SEMESTER SCHEME-2020-21

#### FOR DIPLOMA IV SEMESTER (TEXTILE DESIGN) (TD)

(SESSION 2021-2022& ONWARDS)

Subject		Dis	stributi	on of T	<b>Time</b>		Distrib	ution	of Max.	Mark	s/ Duration	1	7D 4 1	
Code	Subject	]	Hours <sub>J</sub>	per we	ek	En	d Semest	er Ex	am.	Int	ernal Asses	ssment	Total Marks	Credits
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi.	PR(S)	Marks	
*TD 4001	Environmental Studies-II	2			2	60	3			20	20		100	2.0
TD 4002	Dyeing Technology- II	4			4	60	3			20	20		100	4.0
TD 4003	Structural Textile Design- III	4			4	60	3	-	J	20	20		100	4.0
TD 4004	Traditional Indian Textiles -II	1			1	60	3	->		20	20		100	1.0
TD 4005	Design and Fashion Forecasting	4			4	60	3			20	20		100	4.0
TD 4006	Computer Aided Textile Design -II Lab			3	3		7-7	40	3			60	100	1.5
TD 4007	Dyeing Technology- II Lab			3	3			40	3			60	100	1.5
TD 4008	Printed Fabric Design -II Lab			3	3	-		40	6			60	100	1.5
*TD 4009	Environmental Studies-II Lab			2	2			40	3			60	100	1.0
TD 4010	Traditional Indian Textiles -II Lab			4	4			40	6			60	100	2.0
TD 4011	Drawing and Rendering II Lab			3	3			40	6			60	100	1.5
*TD 4444	Anandam (Joy of Giving)			1	1							100	100	2.0
	Students Centered Activities			2	2									
	Total	15		21	36	300		240		100	100	460	1200	26
											Gran	d Total :	1200	26

1. L : Lecture

6.

: Marks for End Semester Exam for Practical: Marks for class tests (Internal Assessment)

T : Tutorial
 P : Practical

7. TU/Assi: Marks for tutorials/Assigment (Internal Assessment)

TH : Marks for End Semester Exam for Theory

8. PR(S) : Marks for practical and viva (Internal Assessment)

\*TD 4001, \*TD 4009 and \*TD 4444 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

**NOTE:** Students will go for 6 weeks Summer Internship in the Summer Vacations after Fourth Semester. The Assessment of the Summer Internship will be done in Fifth Semester

#### GOVERNMENT OF RAJASTHAN

#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

#### TEACHING AND EXAMINATION SCHEME

SEMESTER SCHEME-2020-21

FOR DIPLOMA V SEMESTER (TEXTILE DESIGN) (TD)

SESSION 2022-2023 & ONWARDS

Subject		Dist	tributi	ion of T	Гіте		Distribu	ıtion (	of Max	. Marl	ks/ Duratio	n	TD 4 1	
Code	Subject	H	lours r	per wee	ek	End	l Semeste	er Exa	am.	Inte	ernal Asses	ssment	Total Marks	Credits
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi	PR(S)	Mains	
*TD 5001	Professional Management & Entrepreneurship-I	3			3	60	3	\ \	-	20	20		100	3.0
TD 5002	Printing Technology- I	2			2	60	3			20	20		100	2.0
TD 5003	Structural Textile Design- IV	4			4	60	3	J		20	20		100	4.0
TD 5004	Fashion Design and Illustration -I	1			1	60	3			20	20		100	1.0
TD 5005	Garment Technology	3			3	60	3		-	20	20		100	3.0
TD 5006	Computer Aided Textile Design- III Lab			3	3	(7)		40	3			60	100	1.5
TD 5007	Printing Technology- I Lab			3	3			40	6			60	100	1.5
TD 5008	Printed Fabric Design -III Lab			5	5	<b>-</b>		40	6			60	100	2.5
TD 5009	Free Hand Drawing Painting -I Lab			3	3			40	6			60	100	1.5
TD 5010	Fashion Design and Illustration- I Lab			4	4			40	6			60	100	2.0
TD 5011	Project		AT A	2	2				1					0.00
TD 5012	Summer Internship-II(6 Weeks after IV Semester)		-7	7				100					100	3.0
*TD 5555	Anandam (Joy of Giving)	<b></b>	)	1	1							100	100	2.0
	Students Centered Activities	-		2	2				-					-
	Total	13		23	36	300		300		100	100	400	1200	27
4		_									Grand	d Total:	1200	27

1. L : Lecture

: Tutorial

3. P : Practical

4. TH: Marks for End Semester Exam for Theory

PR: Marks for End Semester Exam for Practical

6. CT : Marks for class tests (Internal Assessment)

TU/Assi : Marks for tutorials/Assigment (Internal Assessment)

. PR(S) : Marks for practical and viva (Internal Assessment)

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning. Note:

Project will be continued and Assesed in VI Semester

<sup>\*</sup>TD 5001, and \*TD 5555 are same in all Branches of Non Engineering

#### **GOVERNMENT OF RAJASTHAN**

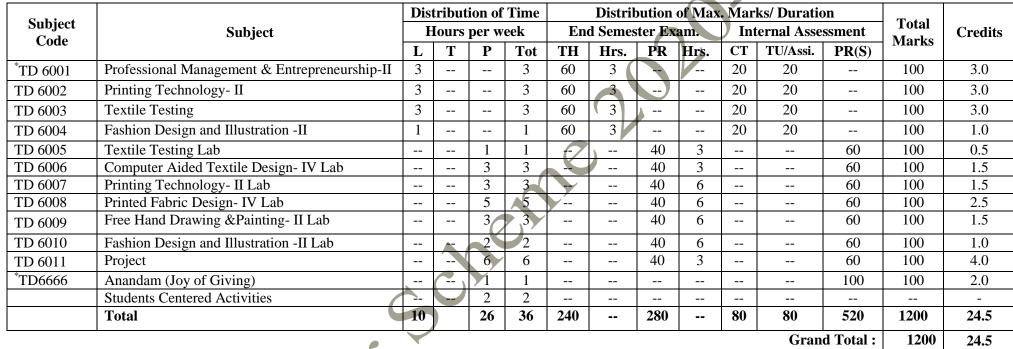
#### BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR

#### TEACHING AND EXAMINATION SCHEME

SEMESTER SCHEME-2020-21

FOR DIPLOMA VI SEMESTER (TEXTILE DESIGN)(TD)

SESSION 2022-2023 & ONWARDS



L : Lecture
 T : Tutorial
 PR : Marks for End Semester Exam for Practical
 CT : Marks for class tests (Internal Assessment)

7. TU/Assi: Marks for tutorials/Assignment (Internal Assessment)
1. TH: Marks for End Semester Exam for Theory
2. TU/Assi: Marks for tutorials/Assignment (Internal Assessment)
3. PR(S): Marks for practical and viva (Internal Assessment)

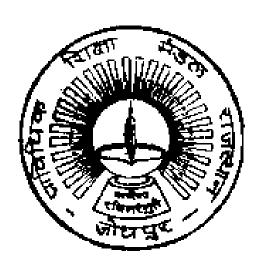
\*TD 6001, and \*TD 6666 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

(I Semester) Prepared:2020-21

## **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

## **SEMESTER SCHEME-2020-21**



## I SEMESTER

(SESSION 2021-2022 & ONWARDS)

#### COMMUNICATION SKILLS IN ENGLISH - I

Course Code	TD-1001 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - I
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

#### RATIONAL

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

#### SUBJECT LEARNING OUTCOMES (SLOS

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

#### **CONTENTS**

 $\mathbf{L}$ 

Prepared: 2020

1. Grammar::

- 1.1 Parts of Speech: Noun; Pronoun; Verb; Adverb; Adjective; Preposition; Conjunction; Interjection
- 1.2 Common errors in usage of parts of speech
- 1.3 Articles, Modals in Conversational Usage, Tenses, Modals: Can, Could, Shall, Should. Will, Would, May, Might, Must, Need not, Darenot, ought to, Used to.

#### 2. Punctuation:

2.1 Full stop, Comma, Question mark, Exclamation mark, Inverted Commas, Capital letters.

#### 3. Letter Writing and Report Writing

#### **REFERENCES BOOKS**

1. Intermediate English Grammar Raymond Murphy, Cambridge University Press

2. English Grammar, Usage & Composition Tickoo & Subramanian, Pub: S. Chand and Co.

3. A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet Pub: ELBS

4. High School English Grammar and Composition Wren & Martin, Pub: S. Chand and

5. ABC of Common Grammatical Errors Nigel D Turton, Macmillan India Ltd. 6. Soft Skills

Dr. K. Alex. Pub: S. Chand and Co.

Textile Design(TD) Prepared: 2020

#### **COMPUTER APPLICATIONS-I**

Course Code	TD-1002 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - I
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

#### **RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course content is designed to give an overview and understand working of computer components and Operating System. The course also focuses on basic application Software for office automation.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After studying the subject, the students will be able to appreciate the role of Computer Technology, more specifically computer hardware, software and its application in the present social and economic scenario.

#### **CONTENTS**

6

#### 1. Introduction

- **1.1** Characteristics of Computers
- **1.2** Application of Computer
- **1.3** Component of Computer
  - 1.3.1 Block Diagram of Computer
  - 1.3.2 ALU and CU
  - 1.3.3 Input Devices: Keyboard, Mouse, Joystick, Scanner, Optical Mark Reader, Bar-code Reader, Magnetic Ink Character Reader, Web Camera
  - 1.3.4Output Device: Monitor, Impact printer Dot Matrix, Non Impact Printers: Laser and Inkjet Printer
  - 1.3.5 Memory Organization, Primary Memory, Secondary Memory
- **1.4** Software
  - 1.4.1 System Software
  - 1.4.2 Application Software
- **1.5** Relationship between Hardware and Software

#### 2. Operating System

4

- **2.1** Concept of Operating System
- **2.2** Functions of Operating System
- **2.3** Creating Folder and Shortcut
- **2.4** Study of Popular Operating Systems: Windows, Androids.
- **2.5** Control Panel: Adding new hardware and software, Display, Adding new font, User account management

#### 3. Office Automation Software

9

- **3.1** Word Processing
  - 3.1.1 Copy, Paste, Find and Replace, Redo Undo, Change Case, Spell Check
  - 3.1.2 Creating and Formatting Tables, Mail Merge
  - 3.1.3 Character and Paragraph Formatting, Page Formatting, Header Footer
- **3.2** Spreadsheet
  - 3.2.1 Creating, Saving and Editing a Workbook

Textile Design(TD)

- 3.2.2 Formatting cells: changing data alignment, different number formats, changing font, adding borders and colors
- 3.2.3 Sorting and Filtering, Charts and Graphs
- **3.3** Presentation Software
  - 3.3.1 Creating, Opening, Saving presentations and Printing: Slides, Handout
  - 3.3.2 Slide Layout, Presentation Views
  - 3.3.3 Design Presentation, Running and Controlling a Slide Show

#### 4. Applications of Mobile Phones

3

Prepared: 2020

- **4.1** Importance of Mobile Phones
- **4.2** Different Features of Mobile phones like SMS, Instant Messaging Services and File sharing
- **4.3** Different applications of mobile phones in Education and Business.

#### REFERENCE BOOKS

1 Computer Fundamentals

P.K. Sinha and P. Sinha, BPB publication.

2. Microsoft office for 2016

Amy Kinser, Pearson education.

\*\*\*\*\*

#### INTRODUCTION TO TEXTILES-I

Course Code	TD-1003 (Same as FT-1003)
Course Title	Introduction to Textiles-I
Number of Credits	3(L-3 T-0, P-0)
Prerequisites	None

#### **RATIONALE**

This subject may be considered as the "backbone" for the students of Textiles Design "Textile" is related with "Fiber" "Yarn" and "Fabric" which may be taught to students through this subject. Apart from these constructive aspects, we also teach the students the different decorating techniques, thus after going through this subject the students may become capable in understanding all other textile related subjects.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. The student will be able to understand basics of textile fibre and their characteristics.
- 2. Sources of different textile fibres.
- 3. Manufacturing of natural, regenerated and synthetic fibres.
- 4. Different types of yarn

#### CONTENTS

1. Fibre 10

- **1.1** Definition of fiber, yarn, fabric and blends
  - **1.2** Essential properties of fiber
  - **1.3** Classification of fibers
  - **1.4** Identification of textile fibers

2. Yarn 18

- **2.1** Elementary knowledge of processing of the following fibers into Yarn
  - **2.1.1** Natural Fiber -cotton, wool, silk
  - 2.1.2 Synthetic Fiber polyester, nylon and rayon
- **2.2** Physical and chemical properties of the above mentioned fibers.

### 3. Types of yarn

05

- **3.1** Classification of yarn
- 3.2 Introduction to different types of yarn
  - **3.2.1** Standard Yarn
  - **3.2.2** High tenacity yarn
  - 3.2.3 Luster yarn
  - **3.2.4** Carpet yarn
  - 3.2.5 Stretch yarn
  - **3.2.6** Core yarn
  - 3.2.7 Bulked yarn
  - **3.2.8** Spiral yarn
  - **3.2.9** Hosiery yarn

#### REFERENCE BOOKS

1. Textiles Fiber to

2. Textiles.

Corbean

Norma Hallen and Jane Sadder

Textile Design(TD)

6. Textile Science.

Prepared: 2020

3. Textile Fibers. K.P. Hess

**4.** Fundamental of Textiles and their Care. SushilaDhantyagi

**5.** Textile Science. J.T. Marsh

**7.** Fiber and Fabrics of Today. Mark

**8.** Textile Products Selection Use and Care. Alexander

**9.** Textile Yarn Technology Structure and Appearance. J.C. Goswami ,J.G. Martindele, F.A.Scardina

10. Textiles. William Morries

11. The Standard Hand Book of Textiles. A.J. Hall

**12.** Textiles in Perspective.

13. Fiber and Fabric of Today.

14. From Fibers to Fabric. Elizabeth Crale

15. Understanding Textiles. PhyllipG. Tortora

16. Processing of Fibers in Yarn. V. Usenko

17. Textile Fibers. V.A.Shenai

18. Textile Fabrics and their Selection. SabelB. Wintate

19. Essentials of Textile. Marjory L.Jeseph

20. Household Textiles and Laundry Work. DurgaDwelkar

21. Chemical Technology of Fibrous Material. Sadox

Vilenski

Era Block and Smith

Hellon Thomson

#### FUNDAMENTAL THEORY OF TEXTILE DESIGN-1

Course Code	TD-1004 (Same as FT-1004)
Course Title	Fundamental Theory of Textile Design-I
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

#### **RATIONALE**

To enhance the beauty of design, color plays a very significant role in the expression of one design. Different colour schemes provide different feeling and this impart a sense of enrichment to the design. "As the cloth is required to man, colour in required to design", this thinking itself clarifies that there is no use of textile design without adding colors. Thus the aim of this subject is to develop colour sense.

Sketching and drawing are the language of art. If one can sketchand draw the different objects freely,the main aims of this to teach the basics of sketching and drawing with different medium.

Designing is an art created by men with certain limitations. There are some different principles through which one can learn art with more depth and details with the help of different tools, materials and their application.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. Functions and uses of colour to develop pattern recognition, memory and absorbing new information.
- **2.** Locate, compare, understand and recall information of colour terminology faster.
- **3.** The course helps students to development of new design aspects for novelty in fabric surface, textile products and various other textile materials in terms of colours and there developments.

#### **CONTENTS**

#### 2. Colour:

6

Prepared: 2020

- 1. Meaning of Colour and Colour Ways
- **2.** Colour Terminology:
  - **2.2.1** Hue, Chroma, Value, Tint, Shades.
  - **2.2.2** Elements of Painting Line, Form, Value, Texture, Colour, Light & Shade etc.
  - **2.2.3** Principals of Composition Space-division, Balance, Harmony, Rhythm, Proportion, Contrast
  - **2.2.4** Pigment theory of Colour wheel.
  - **2.2.5** Light theory of Colour wheel.

#### 3. Construction and Placement of Design to form Pattern:

Z

- **1.** Drop 1/4drop,1/2drop,3/4drop
- 2. Drop Reverse
- 3. Unit Repeat.
- **4.** Sateen Basis.
- **5.** Diamond.
- **6.** Rectangular.
- 7. Ozee.

#### 4. Understanding of Various Styles of Design:

- 1. Geometrical
- **2.** Floral.
- 3. Traditional
- 4. Folk
- **5.** Realistic
- 6. Symbolic
- 7. Abstract
- **8.** Conventional
- 9. Modern.

#### REFERENCE BOOKS

- 1. Colour Source Book for Graphic Designers
- **2.** Designer : Guide to Colour
- **3.** Colour Harmony
- **4.** Colour Trends in Two Volume.
- **5.** Watson's Textile Design and Colour.
- **6.** Textile Science.
- 7. Roopprad Kala keMooladhar
- **8.** Repeat Patterns
- **9.** Abstract and Floral Designs
- 10. रूप कला के मूलाधार

SadaoNokamnar

SadaoNokamnar

Hideaki chijiwa

Products Ltd.

Z. Gresicki

Vilenski

Sharma/Agarwal.

Phillips and Peter

E.A.Segug

शर्मा एवं हटवाल

08

#### INTRODUCTION OF TEXTILE ART AND CRAFT LAB

Course Code	TD-1005 (Same as FT-1005)
Course Title	Introduction of Textile Art and Craft Lab
Number of Credits	2(L-0 T-0, P-4)
Prerequisites	None

#### **RATIONALE**

Indian art and craft are well known to the world, especially the textile related arts are of world fame, hence the students of Textile Design should be well aware about this rich heritage. The ultimate aim of this subject is to impart essential knowledge to the students regarding important aspects of art so that they may utilize these arts for their creative thinking of designing and may enrich their designing with the help of these arts.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. Development of fine motor skills
- 2. Traditional art of different region and its culture
- 3. Ornamentation of fabric with batik, tie and dye techniques
- 4. Enhances dexterity
- 5. Improvement of hand-eye coordination
- 6. Learn to appreciate art and culture
- 7. Enhances creativity

#### CONTENTS

1.	Art of Batik:		10	)

- **1.1** Preparation of a file with Batik samples by various methods on the following surfaces:
  - **1.1.1** Paper
  - **1.1.2** Fabric-cotton and silk.
- **1.2** Preparation of one article
- 2. Stencil Craft: 06
  - **2.1** Preparation of a file by paper stencil method on different fabrics with different designs and colours
  - **2.2** Preparation of one article
- 3. Varli / Mandana Painting.
- 4. Samples of Tie and Dye.
- 5. Madhubani / Phar Painting on Fabric.

#### Note:

- 1. The Following Essential theory should be taught during the practical.
- 1. Study of Indian Crafts and Art Related to Textiles with Reference to:
  - 1. Historical Significance
  - 2. Centres of Production
  - 3. Salient Features
- 2. Study of Various Types and Methods of Batik
- 3. Detailed Study of the Techniques Related to:

- 1. Paper Stencils
- 2. Plastic Stencils
- **4.** Study of Varli / Mandana Folk Arts.
- **5.** Tye and dye
  - 1. Historical Significance
  - 2. Construction Techniques
  - 3. Styles
  - 4. Colour and Motifs
- **6.** Painting
  - 1. Madhubani /phar
- 2. One day industrial visit is necessary

#### **REFERENCE BOOKS**

- 1. Batik Art SarlaSudersan
- 2. Masterpieces of Indian Textiles RustamJ.Metha
- 3. Textiles of India V.A. Shenai
- **4.** Traditional Indian Textiles Colilloeri John
- **5.** Craft traditions of India JoyaJaithely
- **6.** Tie and Dye Textiles of India Murphy
- 7. Tie and dye work journal of Indian art Das. C.R

#### SKETCHING AND DRAWING -I LAB

Course Code	TD-1006 (Same as FT-1006)
Course Title	Stitching and Drawing-I Lab
Number of Credits	3(L-0 T-0, P-6)
Prerequisites	None

#### **RATIONALE**

"Sketching" and "Drawing" are the languages of art. The translation of ideas into practice with the use of this Graphic language is really beyond imagination. If one can sketch and draw the different objects freely, one can be capable in translating his/her imagination on paper. The ultimate aim of this subject is to teach the student the basics of sketching and drawing with different mediums so that they may become able to handle each and every medium for their designing.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject ,the learner will be able to:

- 1. Investigate fundamental design elements and design guidelines.
- 2. This course aims to improve ability in visualizing design patterns.
- 3. Learn to use contrast, different types of perspectives, combinations, and shade and texture skills to create a design.
- 4. Learn to be observant, develop an attention to details and express.
- 5. Learn the most basic skills which lead to draw 3 D forms.
- 6. Explore design through a range of drawing and sketching approaches.
- 7. Drawing and sketching is very valuable skills that can be used in many different industries hence have good job opportunities.

#### CONTENTS

- 1. Nature Studies: Sketching and Drawing of the following from different Angles 40
  - 1.1 Flowers
  - 1.2 Leaves
  - **1.3** Stems.
  - **1.4** Fruits.
  - **1.5** Vegetables.
  - Trees.
  - **1.7** Birds.
  - **1.8** Butterflies
  - **1.9** Landscapes
  - 1.10 Creepers
- 2. Conversion of already drawn form in to Geometrical forms or creative forms

NOTE: A Sketch file for first two exercises shall be maintained by students having three drawing of each topic with at least 3 different angles using. Pencil, Pen and Ink and Water Colours.

#### REFERENCE BOOKS

1. How to Draw and Paint

Wede.

26

Textile	Design(TD)	١.
техине	17681811(117)	,

2. How to Draw3. Its Fun to Sketch with Pencil and Crayons.

4. Plant Life

5. Paradise as a Garden

6. The Illustrated Book a Tree.

7. Trees

8. Reses in Colours9. The Living World

10. Garden Plants

11. Birds

12. The Thomson and Hudson manual of Gills and Robert

Birds

13. How to Draw and Paint Landscape

14. Trees in Perspective

15. Classic textile design

16. Optical and geometrical pattern design

Prepared: 2020 Fester series

Thompson

Thompson

Piccola

Moynihau NicholsauClapharu

Garner and Fredvick

Edland

St. Michael

Michael Wright

Hunt, Lynn and Bogue

Rendering with Pen and Ink

Fester Series

Fester Series

M. DupontAbbermille

spyrosehoremils

Textile Design(TD) Prepared: 2020

#### **BASIC OF DESIGNING-I LAB**

Course Code	TD-1007 (Same as FT-1007)
Course Title	Basics of Designing-I Lab
Number of Credits	2.5(L-0 T-0, P-5)
Prerequisites	None

#### **RATIONALE**

"Designing" is an art created by men with certain limitations. There are some definite principals through which one can learn art with more depth and detail. The aim of this subject is to teach all the basics related to designing including tools, materials and their application. By learning this subject, students may express themselves and their feelings on different surfaces by different Medias and if once student become able to express oneself, we reach near to our goal.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. As everyone is known to the fact that the basics and fundamentals of any subject or field are to be learnt extensively for strong foundation.
- 2. So as in the field of Textile Designing also it is necessary to learn the conceptual importance of Drawing, Lines, Textures, Compositions and Formations.
- 3. Therefore, in this subject all these basics are being put on theory cum practical aspects to accomplish the designing part.
- 4. Hence it is an important learning to get fully acquainted and understanding for the execution of the perfect design and being an innovative designer with cost effectiveness.

#### CONTENTS

- 1. Simple exercises for handling set square, compass, crockel pen etc. 5
- 2. Work in all type of LINES using soft pencil & ink.
- 3. Drawing of all basic shapes on:
  - 3.1 Medias:
    - 3.1.1 Pencils Different type of Pencil with Tonal effects
    - 3.1.2 Colored ink
    - 3.1.3 Crayon / staedtler
    - 3.1.4 Poster colors
    - 3.1.5 Water colors
    - 3.1.6 Oil colors
    - 3.1.7 Charcoal
  - 3.2 Material:
    - 3.2.1 Cartridge sheet
    - 3.2.2 Ivory sheet
    - 3.2.3 Handmade sheet
    - 3.2.4 Canvas/ oil sheet
- 4. Composition of geometrical shapes with poster colors.
- 5. Different type of textures with all media.

• Preparation of 10 greeting cards using Different textures with all Medias and

materials. Preparation of 10 greeting cards using Different textures with all Medias and

#### REFERENCE BOOKS

10

20

- 1. Roopprad Art Mooladhar Sharma & Agarwal
- 2. Repeat Pattern Phillips & Peter.
- 3. Abstract and Floral DesignE.A. Seguy.
- 4. Encyclopedia of Textiles

#### COMMUNICATION SKILLS IN ENGLISH-I LAB

Course Code	TD-1008 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - I Lab
Number of Credits	1(L-0 T-0, P-2)
Prerequisites	None

#### **RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

#### SUBJECT LEARNING OUTCOMES (SLOS)

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

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Prepared: 2020

We envisage two successive stages for attaining skills in communication ability;

- 1. Listening
- 2. Speaking

We can club them together as shown below.

1. Listening: 7

For improving listening skills, the following steps are recommended-

- 1.1 Listen to Prerecorded Tapes
- 1.2 Reproduce vocally what has been heard
- 1.3 Reproduce in Written form
- 1.4 Summarise the text heard
- 1.5 Suggest Substitution of Words and Sentences
- 1.6 Answer Questions related to the taped text
- 1.7 Summarise in Writing

2. Speaking: 7

Introducing English consonant-sounds and vowel-sounds

- 2.1 Remedial exercises where necessary
- 2.2 Knowing Word stress
- 2.3 Shifting word stress in poly-syllabic words

[For pronunciation practice read aloud a para or page regularly while others monitor]

#### 3. Body Language:

8

- 3.1 Personal Appearance
- 3.2 Posture
- 3.3 Gestures and Hand Movements

#### Textile Design(TD)

- 3.4 Eye Contact
- 3.5 Facial Expressions

#### Note:

- 1. The Medium of teaching and examination will be English.
- 2. At least on question will be set from each unit.
- 3. No theory question will be set from syllabus of practical.

#### **REFERENCE BOOKS**

7. Intermediate English Grammar Press

Raymond Murphy, Cambridge University

8. English Grammar, Usage & Composition Co.

Tickoo & Subramanian, Pub: S. Chand and

9. A Practical Eng. Grammar (and its Exercise Books)

Thomson and Martinet Pub: ELBS Wren & Martin, Pub: S. Chand and

10. High School English Grammar and Composition Co.

Nigel D Turton, Macmillan India Ltd. Dr. K. Alex Pub: S. Chand and Co.

Prepared: 2020

11. ABC of Common Grammatical Errors

12. Soft Skills

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03

#### COMPUTER APPLICATIONS-I LAB

Course Code	TD-1009 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - I Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

#### **RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course content is designed to give an overview and understand working of computer components and Operating System. The course also focuses on basic application Software for office automation.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After studying the subject, the students will be able to appreciate the role of Computer Technology, more specifically computer hardware, software and its application in the present social and economic scenario.

		CONTENTS	
1.	Ove	erview of Parts of Computer, Practice of using My Computer, creating, deleti	ng
	fold	ers and shortcuts.	03
2.	Prac	etice on Control Panel/ Installing/Uninstalling/ Adding Devices	03
3.	Exe	rcise on Word Processing	09
	3.1	Creating, Saving and Opening documents	
	3.2	Editing Documents-Cut, Copy, Paste, Undo, Redo, Copying one document	to other,
		Change Case, Go to	
	3.3	Character and Paragraph Formatting, Numbering and Bullets	
	3.4	Page Formatting, Header and Footer, Page Break, Watermark	
	3.5	Spell Check, Find and Replace, Inserting Pictures and Clip-arts	
	3.6	Working with Tables	
	3.7	Mail-Merge.	
4.	Exe	rcises on Spreadsheets:	09
	4.1	Creating, Saving and Opening worksheet.	
	4.2	Editing Worksheet.	
	4.3	Formatting Cells- Font, Number Formats Alignment and Borders.	
	4.4	Charts and Graphs.	
.4	4.5	Sorting and Filtering.	
5.		reises on Presentation Package:	06
	5.1	Creating, saving and Opening presentations .	

#### **REFERENCE BOOKS**

1 Computer Fundamentals P.K. Sinha and P. Sinha, BPB publication.

2. Microsoft office for 2016 Amy Kinser, Pearson education.

Adding animation in slides

Running a Slide Show

5.4 Printing Slides and Handouts

6. Hands on Experience on usage of Mobile Phones

5.2

5.3

Textile Design(TD) Prepared: 2020

#### INTRODUCTION TO TEXTILES-I LAB

Course Code	TD-1010 (Same as FT-1010)
Course Title	Introduction to Textiles-I Lab
Number of Credits	.5(L-0 T-0, P-1)
Prerequisites	None

#### **RATIONALE**

This subject may be considered as the "backbone" for the students of Textiles Design "Textile" is related with "Fiber" "Yarn" and "Fabric" which may be taught to students through this subject. Apart from these constructive aspects, we also teach the students the different decorating techniques, thus after going through this subject the students may become capable in understanding all other textile related subjects.

#### **SUBJECT LEARNING OUTCOMES (SLOS)**

After successful completion of this subject, the learner will be able to:

- 1. The student will be able to understand basics of textile fibre and their characteristics.
- 2. Sources of different textile fibres.
- 3. Manufacturing of natural, regenerated and synthetic fibres.
- 4. Different types of yarn

#### **CONTENTS**

**1.** Identification test 05

**1.1** Appearance test

**1.2** Feeling test

**1.3** Creasing test

**1.4** Breaking test

**1.5** Tearing test

2. Microscopic study of fiber cross section 02 04

**3.** Market survey

#### REFERENCE BOOKS

1. Textiles Fiber to Corbean

2. Textiles. Norma Hallen and Jane Sadder

3. Textile Fibers. K.P. Hess

4. Fundamental of Textiles and their Care. SushilaDhantyagi

**5.** Textile Science. J.T. Marsh 6. Textile Science. Vilenski

7. Fiber and Fabrics of Today. Mark

**8.** Textile Products Selection Use and Care. Alexander

9. Textile Yarn Technology Structure and Appearance. J.C. Goswami, J.G.

Martindele, F.A.Scardina

10. Textiles. William Morries

11. The Standard Hand Book of Textiles. A.J. Hall

**12.** Textiles in Perspective. Era Block and Smith

13. Fiber and Fabric of Today.

Hellon Thomson **14.** From Fibers to Fabric. Elizabeth Crale

**15.** Understanding Textiles. PhyllipG.Tortora

- 16. Processing of Fibers in Yarn. V. Usenko
- 17. Textile Fibers, V.A.Shenai
- 18. Textile Fabrics and their Selection. SabelB. Wintate
- 19. Essentials of Textile. Marjory L.Jeseph
- 20. Household Textiles and Laundry Work. DurgaDwelkar
- 21. Chemical Technology of Fibrous Material. Sadov

#### FUNDAMENTAL THEORY OF TEXTILE DESIGN-I LAB

Course Code	TD-1011 (Same as FT-1011)
Course Title	Fundamental Theory of Textile Design-I Lab
Number of Credits	2.5(L-0 T-0, P-5)
Prerequisites	None

#### **RATIONALE**

To enhance the beauty of design, color plays a very significant role in the expression of one design. Different colour schemes provide different feeling and this impart a sense of enrichment to the design. "As the cloth is required to man, colour in required to design", this thinking itself clarifies that there is no use of textile design without adding colors. Thus the aim of this subject is to develop colour sense.

Sketching and drawing are the language of art. If one can sketchand draw the different objects freely,the main aims of this to teach the basics of sketching and drawing with different medium.

Designing is an art created by men with certain limitations. There are some different principles through which one can learn art with more depth and details with the help of different tools, materials and their application.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. The student will be able to understand basics of textile fibre and their characteristics.
- 2. Sources of different textile fibres.
- 3. Manufacturing of natural, regenerated and synthetic fibres.
- 4. Different types of yarn

### CONTENTS

1. Colour Wheel

**1.1** Light theory of colour wheel

**1.2** Pigment theory of colour wheel

(Preparation of sheet mentioning details of particular they taking inspiration from nature and objects)

2. Preparation of at Least 6 Different Colour ways -

12

10

Prepared: 2020

- **2.1** Sample studied, based on Variation in Hue, value, and Chroma.
- 3. Collection of different samples in reference of colours and colour ways with different styles of design. 10
- Construction of geometrical design with basic colours in reference to context of different drops.
- Drawing and Painting equipment materials tools their uses, and techniques-Lead Pencils, Charcoal, Crayons or Pastels, Erasers, Brushes, Boards, Board pins & Colors 13 etc.

#### REFERENCE BOOKS

1. Colour Source Book for Graphic Designers SadaoNokamnar **2.** Designer : Guide to Colour SadaoNokamnar **3.** Colour Harmony Hideaki chijiwa **4.** Colour Trends in Two Volume. Products Ltd. **5.** Watson's Textile Design and Colour. Z. Gresicki Vilenski

6. Textile Science.

Textile Design(TD) Prepared: 2020

7. Roopprad Kala ke Mooladhar

**8.** Repeat Patterns

9. Abstract and Floral Designs

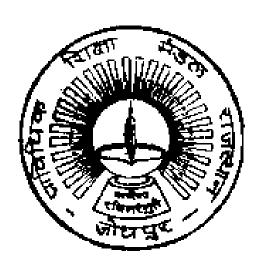
10. रूपकलाकेमूलाधार

Sharma/Agarwal. Phillips and Peter E.A.Segug शर्माएवंहटवाल

(II Semester) Prepared:2020-21

## **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

## **SEMESTER SCHEME-2020-21**



## **II SEMESTER**

(SESSION 2021-2022 & ONWARDS)

Textile Design (TD) Prepared: 2020

#### **COMMUNICATION SKILLS IN ENGLISH - II**

Course Code	TD-2001 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - II
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

#### **RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

#### SUBJECT LEARNING OUTCOMES (SLOS)

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

#### CONTENTS

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2

1. Vocabulary Building:

- 1.1. Prefixes and Suffixes
- 1.2. Synonyms and Antonyms
- 1.3. One Word Substitution
- 1.4. Words Often Confused
- 1.5. Words Often Misspelt
- 2. Sentence Building:
  - 2.1. Types of Sentences and their Transformation -
  - 2.2. Interchange of Affirmative and Negative sentences
  - 2.3. Interchange of Interrogative and Assertive sentences
  - 2.4. Interchange of Exclamatory and Assertive sentences
- 3. Composition:
  - 3.1. Unseen Passage, Précis Writing
- 4. Essay Writing:

4.1. Essays on general topics and topics related to environmental problems.

1

#### **REFERENCE BOOKS**

1. Intermediate English Grammar Raymond Murphy, Cambridge University Press

2. English Grammar, Usage & Composition Tickoo& Subramanian, Pub: S. Chand and Co.

Thomson and Martinet, Pub: ELBS

4. High School English Grammar and Composition

3. A Practical Eng. Grammar (and its Exercise Books)

Wren & Martin, Pub: S. Chand and

Co.

5. ABC of Common Grammatical Errors

Nigel D Turton, Macmillan India Ltd.

6. Soft Skills

Dr. K. Alex, Pub: S. Chand and Co.

\* \* \* \*

Textile Design (TD	Pres	pared: 2020

#### **COMPUTER APPLICATIONS-II**

Course Code	TD-2002 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - II
Number of Credits	2(L-2, T-0, P-0)
Prerequisites	None

#### **RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course provides knowledge of internet, email, web browsing and E-commerce. It also gives overview of Cyber Security and Information technology Act.

#### **SUBJECT LEARNING OUTCOMES (SLOS)**

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

5

9

### 1. Computer Network

1.1 Need of networks

- 1.2 Data Transmission Media: Twisted pair, Coaxial, Optical Fiber
- 1.3 Types of Network-LAN, WAN, MAN
- 1.4 Topologies of LAN Ring, Bus, Star, Mesh and Tree
- 1.5 Digital and Analog Transmission
- 1.6 Modem Working and characteristics

#### 2. Internet

- 2.1 Introduction to Internet, Intranet, World Wide Web.
  - 2.2 Internet Service Provider.
  - 2.3 URL
  - 2.4 Web Brower and its functions, Web Page, Search Engines
  - 2.5 Protocol: Basic of http, https, FTP, SMTP, POP
  - 2.6 Basic of E-mail:
  - 2.7 E-mail Service Provider
  - 2.8 Composing E-mail
  - 2.9 Mailing List
  - 2.10Creating Label
  - 2.11Signature
  - 2.12Spam

#### 3. E-Commerce and Cyber Security

- 3.1 Introduction to E-Commerce
- 3.2 Type of E-Commerce
- 3.3 Advantages and Disadvantages of E-Commerce
- 3.4 Payment Gateways
- 3.5 Introduction to different types of Cyber Attacks: Phishing, Ransomware, SQL Injection, Web Jacking, Trojan Attacks, Denial of Service, Cyber Stalking, Password Cracking, Hacking, E mail Spoofing
- 3.6 Cyber laws in India: Introduction to IT (Information Technology) Act'2000
- 3.7 Definition of Virus, Malware, Scanning & Removing Virus using Antivirus Program

#### 4. Multimedia 4

4.1 What is Multimedia?

Textile Design (TD)

Prepared: 2020

- 4.2 Text and Graphics.
- 4.3 Animation, Audio, Images and Video.
- 4.4 Multimedia Application in Education and Entertainments.

#### REFERENCE BOOKS

1 Computer Fundamentals

P.K. Sinha and P. Sinha, BPB publication.

2. Data Communications and Networking Forouzan TMH

3. Internet for Everyone

Alexis Leon & Mathews Leon, Vikas Publishing House, New Delhi.

\*\*\*\*\*

Textile Design (TD)		Prepared: 2020
	INTRODUCTION TO TEXTILES -II	
Course Code	TD-2003 (Same as FT-2003)	
Course Title	Introduction to Textiles-II	
Number of Credits	3(L-3 T-0, P-0)	
Prerequisites	None	

#### **RATIONALE**

This subject may be considered as the "backbone" for the students of Textiles Design "Textile" is related with "Fiber" "Yarn" and "Fabric" which may be taught to students through this subject. Apart from these constructive aspects, we also teach the students the different decorating techniques, thus after going through this subject the students may become capable in understanding all other textile related subjects.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. Yarn preparation for weaving.
- 2. Basics of Dyeing, printing and finishes
- 3. The importance of textile.
- 4. General studies of fabric as selection and suitability, care of fabric etc.

#### CONTENTS

1.	Brief study of yarn preparation for weaving (winding, warping, sizing, doubling)	06
2.	Dyeing and printing	12
	2.1. Definition of Dye, Dyeing and printing	
	2.2. Difference between Dyeing and printing	
	2.3. Classification of methods and styles of printing	
	2.4. Factors affecting dye take up	
3.	Finishes	15
	3.1. Classification of finishes	
	3.2. Aims of giving finishes	
	3.3. Brief study of the following finishes:-	
	3.3.1. mercerising	
	3.3.2. calendering	
	3.3.3. tentering	
	3.3.4. shrinkage control	
	3.3.5 anti crease finish	
(	3.3.6. moth and mildew proof finish	
4.	General studies	06
	4.1. selection and suitability of fabric	
	4.2. care of fabric	
	4.3. general importance of textiles	

#### **REFERENCE BOOKS**

Textiles Fiber to Fabric.
 Textiles.
 Textiles.
 Textile Fibers.
 Corbean
 Norma Hallen and Jane Sadder
 K.P. Hess

Textile Design (TD)

4. Fundamental of Textiles and their Care.

5. Textile Science.

6. Textile Science.

7. Fiber and Fabrics of Today.

Prepared: 2020

SushilaDhantyagi

J.T. Marsh

Vilenski

Mark

9. Textile Yarn Technology Structure and Appearance. Martindele,F.A.Scardina

10. Textiles.

11. The Standard Hand Book of Textiles.

8. Textile Products Selection Use and Care.

12. Textiles in Perspective.13. Fiber and Fabric of Today.

14. FromFibers to Fabric.

15. Understanding Textiles.

16. Processing of Fibers in Yarn.

17. Textile Fibers.

18. Textile Fabrics and their Selection.

19. Essentials of Textile.

20. Household Textiles and Laundry Work.

21. Chemical Technology of Fibrous Material.

William Morries

J.C. Goswami ,J.G.

A.J. Hall

Alexander

Era Block and Smith Hellon Thomson Elizabeth Crale PhyllipG.Tortora

V.Usenko

V.A.Shenai

SabelB.Wintate

Marjory L.Jeseph

DurgaDwelkar

Sadov

Textile Design (TD) Prepared: 2020

#### FUNDAMENTAL THEORY OF TEXTILE DESIGN-II

Course Code	TD-2004 (Same as FT-2004)
Course Title	Fundamental Theory of Textile Design-II
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

#### **RATIONALE**

To enhance the beauty of design, colour plays a very significant role in the expression of one design. Different color schemes provide different feeling and this impart a sense of enrichment to the design. "As the cloth is required to man, colour in required to design", this thinking itself clarifies that there is no use of textile design without adding colours. Thus the aim of this subject is to develop colour sense.

Sketching and drawing are the language of art. If one can sketch and draw the different objects freely, the main aims of this to teach the basics of sketching and drawing with different medium.

Designing is an art created by men with certain limitations. There are some different principles through which one can learn art with more depth and details with the help of different tools, materials and their application.

#### **SUBJECT LEARNING OUTCOMES (SLOS)**

After successful completion of this subject, the learner will be able to:

- 1. Functions and uses of colour to develop pattern recognition, memory and absorbing new information.
- 2. Locate, compare, understand and recall information of colour terminology faster.
- 3. The course helps students to development of new design aspects for novelty in fabric surface, textile products and various other textile materials in terms of colours and there developments.

#### **CONTENTS**

8

2

- 1. Detailed Study of Colour Theories in Context of the following:
  - 1.1. Chromatic Circle.
    - 1.1.1. Primary Colours.
    - 1.1.2. Secondary Colours.
    - 1.1.3. Tertiary Colours.
    - 1.1.4. Colour-Schemes (Colour in Combination). Monochromatic, Polychromatic, Analogueand Acromatic.
    - 1.1.5. Complementary.
    - 1.1.6. Split Colours.
    - 1.1.7. Double Split Colours.
    - 1.1.8. Triad Colours.
    - 1.1.9. Neutral, Warm and Cool Colours.
    - 1.1.10. Contrast: Simultaneous, Successive.
- 2. Place and importance of subject, idea, feeling, imagination, expression, suggestion, symbolism, contrast, medium, technique and colours in composition.
- 3. Meaning of Technical Theory.
- 4. Differences in the meaning of medium, Method, Process, Technique, Style, Expression and Communication.

Textile Design (TD) Prepared: 2020 5. Layout and reproduction Techniques. **REFERENCE BOOKS** 1. Colour Source Book for Graphic Designers SadaoNokamnar 2. Designer: Guide to Colour SadaoNokamnar **3.** Colour Harmony Hideaki chijiwa 4. Colour Trends in Two Volume. Products Ltd. 5. Watson's Textile Design and Colour. Z. Gresicki **6.** Textile Science. Vilenski 7. Roopprad Kala keMooladhar Sharma/Agarwal. 8. Repeat Patterns Phillips and Peter **9.** Abstract and Floral Designs E.A.Segug 10. रूपकलाकेमूलाधार शर्माएवंहटवाल

Textile Design (1D)		11cparca. 2020
STRUCTURAL TEXTILE DESIGN-I		
Course Code	TD-2005 (Same as FT-2005)	
Course Title	Structural Textile Design-I	
Number of Credits	2(L-2 T-0, P-0)	
Prerequisites	None	

#### RATIONALE

Structural fabric design is one of the most important part of Textile design in which the students have to learn and create designs for different woven fabrics, By learning the basics of weaving, students become aware of techniques of fabric construction Actually the techniques of dyeing and printing are applied mainly on constructed fabrics, hence the students should be able to construct at least basic fabrics so that they become aware of the designing of these fabrics.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

1. Develop new weave structures.

Textile Design (TD)

- 2. Create new structures using color and weave effect.
- 3. Draw simple and compound structures.
- 4. Comparative study of weaves
- 5. Understand the fundaments of weave and their use

#### CONTENTS

4
4
4
2
3
2
5

Textile Design (TD) Prepared: 2020

8. Ornamentation of plain weave

REFERENCE BOOKS

- 1. Principles of Weaving Mark Rebinson
- 2. Watson Textile Design and Colour Z.Gresicki
- 3. Textiles Fibre to FabrisBeanaredP.Corbmav
- 4. Under Standing Textiles. G.Tortora.
- 5. Handloom Weaving Technology Allen A. Fannin.

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Textile Design (TD)	Prepared: 2020		
SKETCHING AND DRAWING-II LAB			
Course Code	TD-2006 (Same as FT2006)		
Course Title	Stitching and Drawing-II Lab		
Number of Credits	3(L-0 T-0, P-6)		
Prerequisites	None		

# **RATIONALE**

Sketching and drawing are like stair case to a magnificent design, it's about finding and refining the best ideas, an inseparable parts of design process. a student who can sketch and draw efficiently can explore countless ideas it's one of the most simplest and efficient means of communicating visual ideas. It's more of conveying emotions thought artwork.

#### SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject ,the learner will be able to:

- 1. Investigate fundamental design elements and design guidelines.
- 2. This course aims to improve ability in visualizing design patterns.
- 3. Learn to use contrast, different types of perspectives, combinations, and shade and texture skills to create a design.
- 4. Learn to be observant, develop an attention to details and express.
- 5. Learn the most basic skills which lead to draw 3 D forms.
- 6. Explore design through a range of drawing and sketching approaches.
- 7. Drawing and sketching is very valuable skills that can be used in many different industries hence have good job opportunities.

# CONTENTS

- 1. Object Study: 25
  - 1.1. Understanding of basic Geometrical Shapes in Perspective.
  - 1.2. Expression of Opaque and Transparent Objects.
  - 1.3. Expression of Rough and Glazed Surface Objects.
  - 1.4. Study of Drapery.
- 2. Conversion of already drawn form in to Geometrical Or abstract forms. 18
- 3. Compositions:

35

- 3.1. Composition of realistic forms with Water Colour on 1/4imp. Sheet.
- 3.2. Composition of converted forms with Poster Colours on 1/4imp sheet.

NOTE: A drawing sheet for first two exercises shall be maintained by students having three drawing of each topic with at least 3 different angles using. Pencil, Pen and Ink and Water Colours.

#### REFERENCE BOOKS

1.	Rooppad art	mooladharSharma/agarwal
2.	Abstract and floral design	EA seguy
3.	Abstract art pattern and design	M.P. Vernencil
4.	Focus on Nature	Faher
5.	The Living world	st. Michael

Textile Design (TD)

9. Still life

Prepared: 2020

6. The Thomson and Hudson manual of Rendering with Pen and Ink 17 Birds Gills and Robert

7. How to draw: Human Figure

fester series Ron Rauson.

8. Water Colour and Painting

fester series

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Textile Design (TD)		Prepared: 2020
	<b>BASIC OF DESIGNING-II LAB</b>	
Course Code	TD-2007 (Same as FT-2007)	
Course Title	Basics of Designing-II Lab	
Number of Credits	2.5(L-0 T-0, P-5)	
Prerequisites	None	

#### **RATIONALE**

"Designing" is an art created by men with certain limitations. There are some definite principals through which one can learn art with more depth and detail. The aim of this subject is to teach all the basics related to designing including tools, materials and their application. By learning this subject, students may express themselves and their feelings on different surfaces by different Medias and if once student become able to express oneself, we reach near to our goal.

# SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. As everyone is known to the fact that the basics and fundamentals of any subject or field are to be learnt extensively for strong foundation.
- 2. So as in the field of Textile Designing also it is necessary to learn the conceptual importance of Drawing, Lines, Textures, Compositions and Formations.
- 3. Therefore, in this subject all these basics are being put on theory cum practical aspects to accomplish the designing part.
- 4. Hence it is an important learning to get fully acquainted and understanding for the execution of the perfect design and being an innovative designer with cost effectiveness.

# CONTENTS

- 1. Forming a composition of objects having three dimensional effect with water colors. 10
- 2. Forming a colored picture Composition with animals and trees with poster colors. 10
- 3. Forming a colored picture composition with flowers and butterflies on oil sheet with oil colors.
- 4. Preparation of two textile designs, one Modern and one Traditional with enlarged and reduced version.
- 5. Abstract art or any media.

#### REFERENCE BOOKS

- 1. Roopprad Art Mooladhar.
- 2. Repeat Pattern
- 3. Abstract and Floral Design
- 4. Encyclopedia of Textiles.

Sharma & Agarwal Phillips & Peter.

E.A. Seguy.

Textile Design (TD)

Prepared: 2020

# COMMUNICATION SKILLS IN ENGLISH II-LAB

Course Code	TD-2008 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - II Lab
Number of Credits	1(L-0 T-0, P-2)
Prerequisites	None

#### **RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

# SUBJECT LEARNING OUTCOMES (SLOS)

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

	CONTENTS	
		P
1.	Delivering Short Discourses :	8
	1.1. About Oneself	
	1.2. Describing a Place, Person, an Object	
	1.3. Describing a Picture, Photo	
2.	Group Discussion :	8
	<b>2.1.</b> Developing skills to initiate a discussion [How to open]	
	<b>2.2.</b> Snatching initiative from others [Watch for weak points, etc.]	
3.	Interview Skills:	10
	3.1. Desirable Qualities	
	3.2. Preparation –	
	3.2.1. Know the Company	
	3.2.2. Know Yourself	
	3.2.3. Review Common Interview Questions	
	3.2.4. Prepare Questions You Want to Ask the Interviewer	

## Note:

- 1. The Medium of teaching and examination will be English.
- 2. At least on question will be set from each unit.

3.3. Using Proper Verbal and Non-Verbal Cues

3.4. Exhibiting Confidence

3.5. Tips for Success

3. No theory question will be set from syllabus of practicals.

#### REFERENCE BOOKS

Textile Design (TD) Prepared: 2020

7. Intermediate English Grammar Raymond Murphy, Cambridge University Press

- 8. English Grammar, Usage & Composition Tickoo & Subramanian, Pub: S. Chand and Co.
- 9. A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet, Pub: ELBS
- 10. High School English Grammar and Composition Wren & Martin, Pub: S. Chand and Co.
- 11. ABC of Common Grammatical Errors

Nigel D Turton, Macmillan India Ltd.

Dr. K. Alex, Pub: S. Chand and Co.

12. Soft Skills

# <u>Textile Design (TD)</u> Prepared: 2020

#### **COMPUTER APPLICATIONS-II LAB**

Course Code	TD-2009 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - II Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

#### **RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course provides knowledge of internet, email, web browsing and E-commerce. It also gives overview of Cyber Security and Information technology Act.

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

# SUBJECT LEARNING OUTCOMES (SLOS)

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

P

**CONTENTS** 

1. Study of different types of Networks and Network Topologies.	3
2. Visit to different Internet Sites.	3
3. Content Searching using Search Engines.	3
4. Downloading and uploading on Websites	3
5. Creating E-mail accounts, Composing and Sending E-mail.	3
6. Sending E-mail with attachments and signature.	3
7. Updating E-mail setting	3
8. Hands on Experience on Different types of E-commerce Websites	3
9. Exercise on Online shopping showing use of payment gateways	3
10. Identifying Cyber Attacks	6
11. Multimedia Applications	6

# REFERENCE BOOKS

1 Computer Fundamentals P.K. Sinha and P. Sinha, BPB publication.

2. Data Communications and Networking Forouzan TMH

3. Internet for Everyone Alexis Leon & Mathews Leon, Vikas Publishing House, New Delhi.

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# Textile Design (TD) Prepared: 2020

#### INTRODUCTION TO TEXTILES -II LAB

Course Code	TD-2010 (Same as FT-2010)
Course Title	Introduction to Textiles-II Lab
Number of Credits	.5(L-0 T-0, P-1)
Prerequisites	None

# **RATIONALE**

This subject may be considered as the "backbone" for the students of Textiles Design "Textile" is related with "Fiber" "Yarn" and "Fabric" which may be taught to students through this subject. Apart from these constructive aspects, we also teach the students the different decorating techniques, thus after going through this subject the students may become capable in understanding all other textile related subjects.

# SUBJECT LEARNING OUTCOMES (SLOS)

After successful completion of this subject, the learner will be able to:

- 1. Yarn preparation for weaving.
- 2. Basics of Dyeing, printing and finishes
- 3. The importance of textile.
- 4. General studies of fabric as selection and suitability, care of fabric etc.

# **CONTENTS**

1.	Identification test	04
	1.1. Burning test	
	1.2. Chemical test	
2.	Identification of different types of yarn	03
3.	Market survey	06

# NOTE- prepare a file of all practical exercises done in the subject.

# REFERENCE BOOKS

1. Textiles Fiber to Fabric.	Corbean
2. Textiles.	Norma Hallen and Jane Sadder
3. Textile Fibers.	K.P. Hess
4. Fundamental of Textiles and their Care.	SushilaDhantyagi
5. Textile Science.	J.T. Marsh
6. Textile Science.	Vilenski
7. Fiber and Fabrics of Today.	Mark
8. Textile Products Selection Use and Care.	Alexander
9. Textile Yarn Technology Structure and Appearance.	J.C. Goswami ,J.G.
Martindele, F.A. Scardina	
10. Textiles.	William Morries
11. The Standard Hand Book of Textiles.	A.J. Hall
12. Textiles in Perspective.	Era Block and Smith
13. Fiber and Fabric of Today.	Hellon Thomson
14. From Fibers to Fabric.	Elizabeth Crale
15. Understanding Textiles.	PhyllipG.Tortora
16. Processing of Fibers in Yarn.	V.Usenko
17. Textile Fibers.	V.A.Shenai
18. Textile Fabrics and their Selection.	SabelB.Wintate

Textile Design (TD)

- 19. Essentials of Textile.
- 20. Household Textiles and Laundry Work.
- 21. Chemical Technology of Fibrous Material.

Marjory L.Jeseph DurgaDwelkar Sadov

Prepared: 2020

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Textile Design (TD) Prepared: 2020

#### FUNDAMENTAL THEORY OF TEXTILE DESIGN-II LAB

Course Code	TD-2011 (Same as FT-2011)
Course Title	Fundamental Theory of Textile Design-I Lab
Number of Credits	2.5(L-0 T-0, P-5)
Prerequisites	None

#### **RATIONALE**

To enhance the beauty of design, colour plays a very significant role in the expression of one design. Different color schemes provide different feeling and this impart a sense of enrichment to the design. "As the cloth is required to man, colour in required to design", this thinking itself clarifies that there is no use of textile design without adding colours. Thus the aim of this subject is to develop colour sense.

Sketching and drawing are the language of art. If one can sketch and draw the different objects freely, the main aims of this to teach the basics of sketching and drawing with different medium.

Designing is an art created by men with certain limitations. There are some different principles through which one can learn art with more depth and details with the help of different tools, materials and their application.

# **SUBJECT LEARNING OUTCOMES (SLOS)**

After successful completion of this subject, the learner will be able to:

- 4. Functions and uses of colour to develop pattern recognition, memory and absorbing new information.
- 5. Locate, compare, understand and recall information of colour terminology faster.
- 6. The course helps students to development of new design aspects for novelty in fabric surface, textile products and various other textile materials in terms of colours and there developments.

# **CONTENTS**

20

1.	Chromatic Circle Showing Different Colour mentioned in Theory.	22
	Preparation of Sheets for each Colour Scheme.	23

3. Exercises on Fabric Sample Pieces:

3.1. Fabric sample Study through Imitation of colour and design.

3.2. Chroma and Value.

#### REFERENCE BOOKS

1.	Colour Source Book for Graphic Designers	SadaoNokamnar
2.	Designer: Guide to Colour	SadaoNokamnar
<b>3.</b>	Colour Harmony	Hideaki chijiwa
4.	Colour Trends in Two Volume.	Products Ltd.
5.	Watson's Textile Design and Colour.	Z. Gresicki
6.	Textile Science.	Vilenski
7.	Roopprad Kala keMooladhar	Sharma/Agarwal.
8.	Repeat Patterns	Phillips and Peter
9.	Abstract and Floral Designs	E.A.Segug

Prepared: 2020 Textile Design (TD) शर्माएवंहटवाल 10. रूपकलाकेम्लाधार

STRUCTURAL TEXTILE DESIGN-I LAB		
Course Code	TD-2012 (Same as FT-2012)	
Course Title	Structural Textile Design-I Lab	
Number of Credits	1(L-0 T-0, P-2)	
Prerequisites	None	

#### **RATIONALE**

Structural fabric design is one of the most important part of Textile design in which the students have to learn and create designs for different woven fabrics, By learning the basics of weaving, students become aware of techniques of fabric construction Actually the techniques of dyeing and printing are applied mainly on constructed fabrics, hence the students should be able to construct at least basic fabrics so that they become aware of the designing of these fabrics.

# **SUBJECT LEARNING OUTCOMES (SLOS)**

After successful completion of this subject, the learner will be able to:

- 1. Develop new weave structures.
- 2. Create new structures using color and weave effect.
- 3. Draw simple and compound structures.
- 4. Comparative study of weaves
- 5. Understand the fundaments of weave and their use

# CONTENTS

1. Preparation of loom

Textile Design (TD)

- 1.1. By using four healds
- 1.2. Construct four samples.
- 2. Students shall prepare a file of sample collected from Market for the Weaves Studied and analysis.

#### REFERENCE BOOKS

- 1. Principles of Weaving Mark Rebinson
- 2. Watson Textile Design and Colour Z.Gresicki
- 3. Textiles Fibre to FabrisBeanaredP.Corbmav
- 4. Under Standing Textiles. G.Tortora.
- 5. Handloom Weaving Technology Allen A. Fannin.

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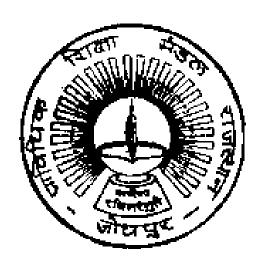
14

<u> Prepared: 2020</u>

(III Semester) Prepared:2020-21

# **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

# **SEMESTER SCHEME-2020-21**



# III SEMESTER

(SESSION 2021-2022 & ONWARDS)

# **ENVIRONMENTAL STUDIES-I**

Course Code	TD-3001 (Common in All Branches of Non Engineering)
Course Title	Environmental Studies-I
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

# **COURSE OBJECTIVES**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

#### **COURSE OUTCOMES**

After completing the course the Learner will

Understand the importance of Environmental cleanliness

Gain knowledge about the causes of Water and Air pollution ,their effects and methods to check the same.

Have the knowlledge of different ttypes of solid waste and their management technices.

# **COURSE CONTENTS**

4.3

4.4

Recovery of resources Sanitary land-filling

		561112112	т
1.	Ge	neral:	L 3
	1.1	Biotic and abiotic environment.	
	1.2	Adverse effects of Environmental Pollution	
	1.3	Control strategies	
2.	Wat	er Pollution:	7
	2.1	Water Quality Standards	
	2.2	Surface and underground water sources	
	2.3	Impurities in water and their removal	
	2.4	Adverse effects of domestic waste water and industrial	
		effluent to surface water sources	
	2.5	Self purification of streams	
3.	Air l	Pollution :	7
	3.1	Sources of air contaminants	
	3.2	Adverse effects on human health	
	3.3	Measures to check air pollution	
	3.4	Greenhouse effect	
	3.5	Global warming	
	3.6	Acid rain	
	3.7	Ozone depletion	
4.	Solic	l Waste Management :	7
	4.1	Introduction to solid waste	
	12	Its collection and disposal	

- 4.5 Vermi-composting
- 4.6 Hazardous waste management

#### **REFERENCE BOOKS:**

1. Patyavaran Shiksha Dr. A.N. Mathur, Dr. N.S. Rathore

& Dr. V.K. Vijay

2. Patyavaran Adhyayan Dr. Ram Kumar Gujar

Dr. B.C. Jat

Patyavaran Avabodh
 Environmental chemistry
 Dr. D.D. Ojha
 S.S. Dora

and pollution control:

5. Ecology concepts and Manuel C. Muller

application:

6. Environmental protection
7. Environmental science
8. Solid waste management :
C.I.. Mantell

9. पर्यावरण विनाश के कगार पर राजीव गुप्ता

11. पर्यावरण जीवों का आंगन प्रेमानन्द चंदोला

12. पर्यावरण (त्रैमासिक) पर्यावरण एवं वन मंत्रालय, नई दिल्ली

13. Panda, New letter WWF-India, New Delhi

#### **DYEING TECHNOLOGY-I**

Course Code	TD 3002
Course Title	DYEING TECHNOLOGY-I
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Dyeing is the application of dyes or pigments on textile material such as fibre, yarns and fabrics with the goal of colour with desired colour fastness. Before dyeing pre-treatments of dyeing such as desizing, scouring, bleaching and mercerization play a vital role in processing. Dyeing process involves interaction between the dye and the fibre as well as the movement of dye into the internal parts of the fibre. The textile designer should have a deep understanding of the application of dyes on various types of fabric; this helps in creating different designs in the printing process.

#### **COURSE OUTCOMES-**

- To learn about the necessity and application of various pre-treatment given to textile materials during the dyeing process.
- Understand the requirements of pre-treatment in the wet processing of textile materials.
- To understand the dyeing principal of various cellulosic, Protein and synthetic fibres.
- To Learn the different types of machinery used for dyeing and pre-treatments.
- Select the dyes and recipe for colouring the various fabrics.

# **COURSE CONTENTS**

1.	Introduction- Flow of textile material in wet processing	4
2.	Brief study Pre-Treatments before dyeing on cotton, Wool and silk.	20
	2.1. Singeing	
	2.2. Desizing	
	2.3. Scouring	
	2.4. Bleaching	
	2.5. Mercerisation	
3.	Classification of Dyes	4
4.	Auxiliaries of Dyeing	8
5.	Terminology and calculation of dyeing	8
	5.1. Shade percentage	
	5.2. Exhaustion percentage	
	5.3. Pick up Percentage	
	5.4. Stock solution	
6.	Detail study of Direct Dye- Classification, Characteristics, Effect of electrolyte,	
	Application and After Treatments.	8

#### **REFERENCE BOOKS:**

1. Textile Science Vilenski

2. Chemistry of Textile Auxiliaries Shenai

3. Cotton Piece Dyeing Gokhale and Shah

4. Chemistry of Dyes and Principle of Dyeing Shenai

5. Technology of Dyeing Shenai

6. Technology of Printing Shenai

7. The Alternative Printing Handbook. Chris TreweekandZeitly

8 Block Printing on Textiles Crikson

9 Study of Contemporary Textiles Bijoy Chandra
Craft of India Block Ptg. Mohanti&Jagdish Prasad

10 Thomas and Hudson manual of Textile printing.

11 Textile printing.

Joyce storey

Time series

12 Textile printing. Tim mara

13 Dictionary of Dyes and Dyeing K.G. Ponting

14 Dyeing and Chemical Technology TertmanGrittin

of Textile Fibres.

15 An Introduction of Textile Printing. Clarke.

16 Handbook of Textile Fibres, Needles.

Dyes and Finishes.

17 Textile Science J.T. Marsh.

18 A Dictionary of Dyes and Dyeing Bell and Hyman

19 A Dictionary of Dyes and Dyeing Gooch.

20 A Glimpse on Chemical Technology R.P.Chakraverty

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#### STRUCTURAL TEXTILE DESIGN -II

Course Code	TD 3003
Course Title	Structural Textile Design II
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

Structural fabric design is one of the most important part of Textile design in which the students have to learn and create designs for different woven fabrics, By learning the basics of weaving, students become aware of techniques of fabric construction Actually the techniques of dyeing and printing are applied mainly on constructed fabrics, hence the students should be able to construct at least basic fabrics so that they become aware of the designing of these fabrics.

16

#### **COURSE OUTCOMES-**

After successful completion of this course, the students should be able to;

- Develop new weave structures.
- Create new structures using color and weave effect
- Draw simple and compound structures.
- Comparative study of weaves
- Understand the fundaments of weave and their use

# **COURSE CONTENTS**

# 1. Types of Loom, loom motions and shedding mechanisms' Loom.

# 1.1 Classification of loom

- 1.1.1Projectile loom
- 1.1.2 Airjet loom
- 1.1.3 Waterjet loom
- 1.1.4 Rapier loom

# 1.2 Loom motions

- 1.2.1 Primary motions
  - A. Shedding
  - B. Picking
  - C. Beating

# 1.2.2 Secondary Motions

- A. Let off motion
- B. Take-up motion
- 1.2.3 Auxiliary motions
  - A. Study of warp stop motion
  - B. Study of weft stop motion

# 1.3 Shedding Mechanism

- 1.3.1 Tappet shedding
- 1.3.2 Dobby shedding
- 1.3.3 Jacquard Shedding

2. Yarn count system and its use	8
3. Twill weave	
3.1 Introduction to twill weave	
3.2 Characteristics of twill weave	
3.3 End product of twill weave	
3.4Method of interlacing yarns to make twill weave	
3.5 Classification of twillweave	
4. Derivatives of twill weave	20
4.1 Broken twill.	
4.2 Zigzag/waved/pointed twill weave	

- 4.3 Diamond design.
- 4.4 Diaper design.
- 4.5 Diagonal design.
- 4.6 Elongated design.
- 4.7 Herring bone twill.
- 4.8 Shaded twill.
- 4.9 Stepped twill.
- 4.10. Combined twill.

# **REFERENCE BOOKS:**

- 1. Principles of Weaving Mark Rebinson
- 2. Watson Textile Design and Colour Z.Gresicki
- 3. Textiles Fibre to FabrisBeanaredP.Corbman
- 4. Under Standing Textiles. G.Tortora.
- 5. Handloom Weaving Technology Allen A. Fannin.
- 6. Fabric Structure and Design, Dr. V. Subramaniam
- 7. Fabric forming by Hasmukhrai
- 8. Weaving calculation by R. Sen Gupta
- 9. Principle of weaving by R. Marks and ATC Robinson
- 10. Watson's Advance Textile Design by Z.J. Grdsicki

#### TRADITIONAL INDIAN TEXTILES- I

Course Code	TD 3004
Course Title	TRADITIONAL INDIAN TEXTILES -I
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

"Tradition" is what going on since long. Traditional textiles in fact create a ground for current textiles. With time, taste and liking changes that make influence on designs and usually the changed aspects of a design are something used on traditions.

India has been so rich in traditional textiles that even today we find impact of these textiles not only in our home market but also in the world market; hence the students must be aware of traditional textiles.

#### **COURSE OUTCOMES-**

- Be able to appreciate traditional textiles of India viz a viz their material, colours, texture and motifs
- Be able to identify and appreciate various Indian traditional crafts/garments and accessories
- Understand the importance of textile crafts with the historical perspective, the impact of modernization and their contemporary status.
- Be able to apply Indian traditional designs and motifs for contemporary designs
- Be able to identify traditional Indian textiles and their product diversification in the local market

#### **COURSE CONTENTS**

1. Study of traditional Indian Textiles in reference to\_\_\_

32

20

- 1.1 Historical significance
- 1.2 Construction Techniques
- 1.3 Styles
- 1.4 Colours&motifs
- 1.5 Centers of Production
- 1.6 Present significance textiles should be studied:
  - 1.6.1 Kanchipuram
  - 1.6.2 Brocode
  - 1.6.3 Patola
  - 1.6.4 Paithini
  - 1.6.5 Kullu Shawl
  - 1.6.6 Jamdani
  - 1.6.7 Carpet
- 2. State wise name of different Indian traditional Textiles.

## REFERENCE BOOKS

1 Hand Woven Fabrics of India

2 Indian Crafts

3 Traditional Indian Textiles

4 Masterpieces of Indian Textiles

Dhamija/ Jain

D.N. Saraf

Gillow John.

Rustam J. Metha

5 Brocades of Ahmedabad

6 South Indian Traditions of Kalamkari

7 Costumes and Textiles of India

8 Miniature Painted Techniques

9 Kashmiri and its Shawls

10 Indian Textiles

Jhala, Uma De. Lolikavaradrajew BrijBhushan Sumo Hendra Ananymous Irwin John.

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#### DRAWING AND RENDERING -I LAB

Course Code	TD 3005
Course Title	DRAWING AND RENDERING -I LAB
Number of Credits	2 (L-0, T-0, P-4)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Rendering is something done to the particular drawing to make it more live, more emphasized and more creative. Drawing and Rendering is of utmost importance for the students perfect designer. It includes each and every aspect of drawing, the different natural and man made objects with different textures and creations.

#### **COURSE OUTCOMES**

- Through this students will be able to create and understand visualization of drawing.
- It helps to draw the three-dimensional designs by adding physical attributes and details by creating live images through various techniques like shading, texture, shadow & reflection.
- It would contain geometry, viewpoint, texture, lighting, and shading information as a description of the virtual scene.

#### **COURSE CONTENTS**

- 1. Study of the following with pencil, pen & ink and water colours:-
  - 28
  - 1.1 Sea shells, sea animals, fishes
  - 1.2 Animals.
  - 1.3 Feathers.
  - 1.4 Stones and rocks.
  - 1.5 Monuments & building.
  - 1.6 Jewellery
- 2. Conversion of already drawn forms into geometrical and abstract forms with poster and water colours.
- 3. Composition of any three forms from design point of view with pen &ink and poster colours, on 9"x9".sheet.

NOTE: A sketch file for first exercises shall be maintained by students having 3 drawings of each topic with at least 3 different angles.

Mary saul.

# **REFERENCE BOOKS:**

1 Shells

2 Gems and Jewels Benjamin Zucker.

3 Masterpieces of Indian Jewellery Jamila Brijbhushan. 4 Frany Goldfish Culture Frank W.Orme.

5 The animal kingdom Cavendish

6 Garden Plants Michael Wright

7 wild life: the beauty of animal

Bellanry

8 How to Draw & Paint
9 learn to paint wild life
Stan Smith
Martiu kuowelding

10 How Invertebrates Live Kaya Mash.

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#### COMPUTER AIDED TEXTILE DESIGN – I LAB

Course Code	TD-3006
Course Title	COMPUTER AIDED TEXTILE DESIGN – I LAB
No. Of Credits	2.0( L-0,T-0, P-4)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

The students will learn web terminology. There are many advantages using CAD/CAM in the textile industry including the ability to more quickly and efficiently make changes to design new design, via digital files CATD systems also facilitate communication among these involved in design and other processes.

Software helps students to use their creativity to make new designs.

# **COURSE OUTCOMES-**

- 1. Throughout this course some learning outcomes should be acquired by the students that meet the objective of this course—
  - Students shall have skill to conceptualize and create various types of design.
  - Students are able to learn
    - Working with objects.
    - Working with lines, outlines and shapes.
    - Working with layers.
  - With the help of the tools students can add a great degree of dimensional effect of richness to drawings.

# **COURSE CONTENTS**

# Application & Software

1.	Corel draw/Photoshop.	13
2.	Illustrator.	13
	MS Office master collection.	13
4.	Design invites & visiting card, Corel &Photoshop.	13

# REFERENCE

- 1. O level module-M 1.2 Internal& web page design V.K. Jain
- 2. Corel draw x6, x5, x7.
- 3. Illustrator.
- 4. MS Office master collection [MS Office 2000 for windows (Sagan)]

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#### DYEING TECHNOLOGY I LAB

Course Code	TD 3007
Course Title	DYEING TECHNOLOGY-I LAB
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Dyeing is the application of dyes or pigments on textile material such as fibre, yarns and fabrics with the goal of colour with desired colour fastness. Before dyeing pre-treatments of dyeing such as desizing, scouring, bleaching and mercerization play a vital role in processing. Dyeing process involves interaction between the dye and the fibre as well as the movement of dye into the internal parts of the fibre. The textile designer should have a deep understanding of the application of dyes on various types of fabric; this helps in creating different designs in the printing process.

# **COURSE OUTCOMES-**

- To learn about the necessity and application of various pre-treatment given to textile materials during the dyeing process.
- Understand the requirements of pre-treatment in the wet processing of textile materials.
- To understand the dyeing principal of various cellulosic, Protein and synthetic fibres.
- To learn the different types of machinery used for dyeing and pre-treatments.
- Select the dyes and recipe for colouring the various fabrics.

# **PRACTICALS**

1.	Desizing of grey cotton fabric	6
2.	Scouring of desized cotton fabric	4
3.	Scouring of Blended fabrics	4
4.	Bleaching of scoured cotton with hydrogen peroxide or bleaching powder.	6
5.	Mercerisation of bleached cotton fabric	4
6.	Direct dye on cotton fabric with different shade percentage.	9
Effects	s of exhausting agent (Common salt) on shade percentage in direct dye. 6	

# **REFERENCE BOOKS:**

1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah
4.	Chemistry of Dyes and Principle of	Dyeing Shenai
5.	Technology of Dyeing	Shenai
6.	Technology of Printing	Shenai
7.	The Alternative Printing Handbook.	Chris TreweekandZeitly

8 Block Printing on Textiles Crikson

9 Study of Contemporary Textiles Bijoy Chandra

Craft of India Block Ptg. Mohanti&Jagdish Prasad

10 Thomas and Hudson manual of Textile printing.

Textile Desi	gn III	Semester

Prepared 2020-21

11 Textile printing.
 12 Textile printing.
 13 Dictionary of Dyes and Dyeing
 14 Joyce storey
 15 Tim mara
 16 K.G. Ponting

14 Dyeing and Chemical Technology TertmanGrittin of Textile Fibres.

15 An Introduction of Textile Printing.

16 Handbook of Textile Fibres, Dyes and Finishes.

17 Textile Science
18 A Dictionary of Dyes and Dyeing
19 A Dictionary of Dyes and Dyeing
19 Gooch.

20 A Glimpse on Chemical Technology R.P.Chakraverty

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Clarke.

Needles.





#### PRINTED FABRIC DESIGN - I LAB

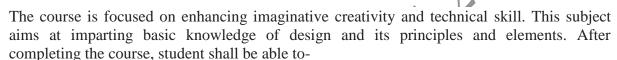
Course Code	TD 3008
Course Title	Printed Fabric Designs - I LAB
Number of Credits	2 (L-0, T-0, P-4)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

Design brings together all elements which serve towards proposed end. A design must necessarily be based on certain specific factors and elements essential for its making.

This subject of printed fabric design refers to the process of creating designs for different type of fabrics and students of textile design need to be able to understand how to produce a textile design for a particular fabric type, with consideration to many other components like weather, age group, methods of printing and use etc.

#### **COURSE OUTCOMES-**



- Identify the influencing factors for the development and evolution of a specific printed fabric design.
- Understand the basic requirement for print design development.
- Identify the pattern repeat and layout.
- Understand the forms and color combinations.
- Identify the types of print.

# **CONTENTS**

- 1- Elements and principles of designing.
- 2- Understanding the placement of design to form pattern
- \* drop 1/4drop, 1/2drop, \* drop reverse \*unit repeat
- \* Sateen basis \*diamond \*rectangular \* ozee
- 3- free hand sketching, enlargement and reduction of motif/design.
- 4- Understanding the different methods and styles of printing.
- 5- To understand the above, market survey should be done by students.
- 6-A file of samples collected during market survey should be prepared by students for proper understanding of different designs.

#### **PRACTICAL**

# **Suggested Exercises:**

- 1. Children Wear:
  - 1.1 Theme: Animated form For: Summer wear Fabric: Rubiavoil

Method: Block Printing

Colorscheme: Maximum Four colors

8

8

9

1.2. Theme: Texture

For: Evening Wear Fabric: Cots wool Method: screen printing

ColorScheme: of your own choice

2. Teenagewear:

2.1 Girls Wear:

2.1.1 Theme: Floral and Geometrical Pattern

For: Dress material

Fabric: cotton

Method: Block Printing

Color Scheme: According to the theme

2.1.2 Theme: Modern Design

For: Party Wear Dress Material

Fabric: Silk

Method: Screen Printing

ColorScheme: Of your own choice

2.2 Boys Wear:

Theme: Decorative Motif

9

For: Bush shirt Fabric: Cambric

Method: Block Printing

ColorScheme: of your own choice

3. Ladies wear:

Theme: Jewellery For: Evening Wear

Fabric: Silk

Method: Screen Printing ColorScheme: Precious stone Color

Note: The essential theory should be taught during the practical subject.

## Reference Books:

1. The Encyclopedia of patterns and motives Dorothy Bosomworth

- 2. Textile Design idea and application CloelSokeliv, PBC International Inc New York
- 3. Ideas and Techniques for fabric designing Linda flower
- 4. The family of flowers Mea Allan
- 5. Masterpieces of Indian jewellery JamilaBrijBhushan
- 6. Typographical Ornaments Luidl Huber
- 7. Gems and Jewels Benjamin Zucber
- 8. Optical and Geometrical Pattern and Design Spyros Horbis
- 9. Zoo animals Frank W. Layne

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#### **ENVIRONMENTAL STUDIES-I LAB**

Course Code	TD-3009 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-I LAB
Number of Credits	1.0 (L-0, T-0, P-2)
Prerequisites	None

# **RATIONALE**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

#### **Course Outcomes**

After completing the course the Learner will

- Understand the extent of Air pollution in their city.
- Understand the extent of Water pollution in their city.
- Know about the Ph value of water, hardness and TDS of water, their importance method of determination.
- Have knowledge of solid waste management of their city

#### **PRACTICALS**

- 1. Visit to the important circles and measurment of Air Quality Index
- 2. Determination of Ph Value of tap Water
- 3. Determination of Hardness of tap Water by EDTA Method
- 4. Determination of TDS of tap Water
- 5. Visiting the local agency to Prepre the report of solid waste management of the city.
- 6. Plantation

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#### TRADITIONAL INDIAN TEXTILES -I LAB

Course Code	TD 3010
Course Title	TRADITIONAL INDIAN TEXTILES-I LAB
Number of Credits	1 (L-0, T-0, P-2)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

"Tradition" is what going on since long. Traditional textiles in fact create a ground for current textiles. With time, taste and liking changes that make influence on designs and usually the changed aspects of a design are something used on traditions.

India has been so rich in traditional textiles that even today we find impact of these textiles not only in our home market but also in the world market, hence the students must be aware of traditional textiles.

## **COURSE OUTCOMES**

- Be able to appreciate traditional textiles of India viz their material, colours, texture and motifs
- Be able to identify and appreciate various Indian traditional crafts/garments and accessories
- Understand the importance of textile crafts with the historical perspective, the impact of modernization and their contemporary status.
- Be able to apply Indian traditional designs and motifs for contemporary designs
- Be able to identify traditional Indian textiles and their product diversification in the local market

# PRACTICALS

- Students shall prepare a sample file by collecting 5 motifs of each topic.
   Exercises
  - 2.1 Kanchipuram Border
  - 2.2 Brocode Border over
  - 2.3 Patola All over
  - 2.4 Kullu shawl Border
  - 2.5 Miniature painting on fabric

# REFERENCE BOOKS

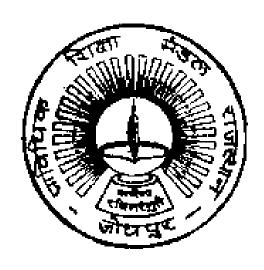
1 Hand Woven Fabrics of India		Dhamija/ Jain
2 Indian Crafts	D.N. Saraf	-
3 Traditional Indian Textiles		Gillow John.
4 Masterpieces of Indian Textiles		Rustam J. Metha
5 Brocades of Ahmedabad		Jhala, Uma De.
6 South Indian Traditions of Kalan	nkari	Lolikavaradrajew
7 Costumes and Textiles of India		Brij Bhushan
8 Miniature Painted Techniques		Sumo Hendra
9 Kashmiri and its Shawls		Ananymous
10 Indian Textiles		Irwin John.

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IV Semester Prepared 2020-21

# **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

# **SEMESTER SCHEME-2020-21**



# IV SEMESTER

(SESSION 2021-2022 & ONWARDS)

# **ENVIRONMENTAL STUDIES-II**

Course Code	BC-4001 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-II
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

# **COURSE OUTCOMES-**

After completing the course the Learner will

- Understand the importance of Environmental cleanliness
- Gain knowledge about the causes of Land pollution, Land erosion and prevention
- Undrstand about Biodiversity and ecosystems
- Water harvesting methods and about the Rural Sanitation
- Know the different Non conventional energy sources and their advantages

# **COURSE CONTENTS**

1.	Land	d Pollution :	I 5
_,	1.1	Soil conservation	_
	1.2	Land erosion	
	1.3	Afforestation	
2.	Ecolo	ogy:	7
	2.1	Basics of species	
	2.2	Biodiversity	
	2.3	Population dynamics	
	2.4	Energy flow	
	2.5	Ecosystems	
3.	Wate	er Harvesting and Rural Sanitation :	,
	3.1	Water harvesting techniques	
	3.2	Different schemes of Rural Water Supply in Rajasthan	
	3.3	Rural Sanitation	
	3.3	Septic Tank	
	3.5	Collection and disposal of wastes	
	3.6	Bio-gas	
	3.7	Community Awareness and participation	
4.	Non	Conventional Energy Sources :	7

Non-Conventional (Renewable) sources of energy

Solar energy, Wind energy, Bio-mass energy, Hydrogen energy

#### **REFERENCE BOOKS:**

4.1

4.2

1. Patyavaran Shiksha Dr. A.N. Mathur, Dr. N.S. Rathore

& Dr. V.K. Vijay

2. Patyavaran Adhyayan Dr. Ram Kumar Gujar Dr. B.C. Jat

3. Patyavaran Avabodh
4. Environmental chemistry and pollution control:
Dr. D.D. Ojha
S.S. Dora

5. Ecology concepts and Manuel C. Muller

application:

Environmental protection
 Environmental science
 Solid waste management : C.I.. Mantell
 Introduction to Environmental Gilbert M Masters Engineering & Science Prentice Hall of India, 1995

10. Concept of Ecology, 1991 Edward J Kormondy

11. Ecology 1975 Odum

12. Environmental Engineering Peavy, Rowe, Tehobaniglum

13. Environmental Impact Mc Graw Hill, NewYork, 1977

Assessment

14. Environmental Technologies for Dr. Upendra Pandel Sustainable Development Dr. M.P. Poonia

15. Environmental Pollution V.K. Kohli & Vikas Kohli

& Management

16. पर्यावरण विनाश के कगार पर राजीव गुप्ता

17. पर्यावरण जीवों का आंगन प्रेमानन्द चंदोला

18. पर्यावरण (त्रैमासिक) पर्यावरण एवं वन मंत्रालय, नई दिल्ली

19. Panda, New letter WWF-India, New Delhi

#### **DYEING TECHNOLOGY-II**

Course Code	TD 4002
Course Title	DYEING TECHNOLOGY-II
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Dyeing is the application of dyes or pigments on textile material such as fibre, yarns and fabrics with the goal of colour with desired colour fastness. Before dyeing pre-treatments of dyeing such as desizing, scouring, bleaching and mercerization play a vital role in processing. Dyeing process involves interaction between the dye and the fibre as well as the movement of dye into the internal parts of the fibre. The textile designer should have a deep understanding of the application of dyes on various types of fabric; this helps in creating different designs in the printing process.

#### **COURSE OUTCOMES-**

- To learn about the necessity and application of various pre-treatment given to textile materials during the dyeing process.
- Understand the requirements of pre-treatment in the wet processing of textile materials.
- To understand the dyeing principal of various cellulosic, Protein and synthetic fibres.
- To Learn the different types of machinery used for dyeing and pre-treatments.
- Select the dyes and recipe for colouring the various fabrics.

## **COURSE CONTENTS**

1. Study the classification, characteristics and application of following dyes-	20
1.1. Reactive dye.	
1.2. Acid dye	
1.3. Sulphur Dye	
1.4. Vat dye	
1.5. Disperse Dye	
2. Dyeing of blended fabric	12
3. Study the construction and application of following dyeing machines-	10
3.1. Yarn Dyeing machines- Cone, Hank	
3.2. Fabric Dyeing Machines- Jigger, Winch, Beam and Jet	
4. Fatness of dyeing on fabric	10

Vilenski

#### **REFERENCE BOOKS:**

Textile Science

- •	10.11.110 20.10.1100	, 11011011	•
2.	Chemistry of Textile Auxiliaries	Shenai	
3.	Cotton Piece Dyeing		Gokhale and Shah
4.	Chemistry of Dyes and Principle of Dyeing	Shenai	
5.	Technology of Dyeing	Shenai	
6.	Technology of Printing	Shenai	
7.	The Alternative Printing Handbook.		Chris TreweekandZeitly

**Block Printing on Textiles** Crikson

Study of Contemporary Textiles Craft of India Block Ptg. Mohanti&Jagdish Prasad

10 Thomas and Hudson manual of Textile printing.

11 Textile printing. 12 Textile printing. Tim mara

13 Dictionary of Dyes and Dyeing

14 Dyeing and Chemical Technology TertmanGrittin

of Textile Fibres.

15 An Introduction of Textile Printing. 16 Handbook of Textile Fibres,

Dyes and Finishes.

17 Textile Science

18 A Dictionary of Dyes and Dyeing Bell and Hyman

19 A Dictionary of Dyes and Dyeing

20 A Glimpse on Chemical Technology

Bijoy Chandra

Joyce storey K.G. Ponting Clarke. Needles. J.T. Marsh. Gooch. R.P.Chakraverty

#### STRUCTURAL TEXTILE DESIGN III

Course Code	TD 4003
Course Title	Structural Textile Design III
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Structural fabric design is one of the most important part of Textile design in which the students have to learn and create designs for different woven fabrics, By learning the basics of weaving, students become aware of techniques of fabric construction Actually the techniques of dyeing and printing are applied mainly on constructed fabrics, hence the students should be able to construct at least basic fabrics so that they become aware of the designing of these fabrics.

# **COURSE OUTCOMES-**

After successful completion of this course, the students should be able to;

- Develop new weave structures.
- Create new structures using color and weave effect
- Draw simple and compound structures.
- Comparative study of weaves
- Understand the fundaments of weave and their use

# **COURSE CONTENTS**

1.	Fabric Analysis	8
	1.1 Definition	
	1.2 Importance of fabric analysis	
	1.3 GSM and Cover factor calculation	
2.	Fabric faults and their remedies	1
3.	Satin and Sateen weave and their extension	8
	3.1 Basic characteristic of satin/sateen weaves	
	3.2 Selection of move number	
	3.3 Strip and check effect of satin and sateen	
4.	Honey comb weave	8
	4.1 Classes of honey comb weave	
	4.2 Characteristics of ordinary honey comb	
	4.3 Characteristics of Brighten honey comb	
5.	Hucka back weave	7
	5.1 Characteristics of hucka back weave	
	5.2 End use of hucka back weave	
6.	Mock leno weave	7
	6.1 Characteristics of mock leno weave	
	6.2 Kinds of structures are produced by mock leno weave	

# 6.3Construction Principle

# 7. Crepe weave

8

- 7.1 Characteristics of crepe weave
- 7.2 Construction methods for crepe weave

# **REFERENCE BOOKS:**

- 1. Principles of Weaving Mark Rebinson
- 2. Watson Textile Design and Colour Z.Gresicki
- 3. Textiles Fibre to FabrisBeanaredP.Corbman
- 4. Under Standing Textiles. G.Tortora.
- 5. Handloom Weaving Technology Allen A. Fannin.
- 6. Fabric Structure and Design, Dr. V. Subramaniam
- 7. Fabric forming by Hasmukhrai
- 8. Weaving calculation by R. Sen Gupta
- 9. Principle of weaving by R. Marks and ATC Robinson
- 10. Watson's Advance Textile Design by Z.J. Grdsicki

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#### TRADITIONAL INDIAN TEXTILES - II

Course Code	TD 4004
Course Title	TRADITIONAL INDIAN TEXTILES -II
Number of Credits	1 (L-1, T-0, P-0)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

"Tradition" is what going on since long. Traditional textiles in fact create a ground for current textiles. With time, taste and liking changes that make influence on designs and usually the changed aspects of a design are something used on traditions.

India has been so rich in traditional textiles that even today we find impact of these textiles not only in our home market but also in the world market, hence the students must be aware of traditional textiles.

## **COURSE OUTCOMES-**

- Be able to appreciate traditional textiles of India viz a viz their material, colours,
- texture and motifs
- Be able to identify and appreciate various Indian traditional crafts/garments and accessories
- Understand the importance of textile crafts with the historical perspective, the impact of modernization and their contemporary status.
- Be able to apply Indian traditional designs and motifs for contemporary designs
- Be able to identify traditional Indian textiles and their product diversification in the local market

# **COURSE CONTENTS**

- 1. Study of traditional Indian Textiles in reference to 8
  - Historical significance
  - 1.2 Construction Techniques
  - 1.3 Styles
  - Colours& motifs 1.4
  - 1.5 Centers of Production
  - Present significance textiles should be studied: 1.6
    - Chanderi
    - 1.6.1 Chanderi1.6.2 Maheshwari
    - Baluchar
    - 6.4 Kashmiri embroidery
    - 1.6.5 Kalamkari
    - Sanganeri 1.6.6
    - 1.6.7 Bandhini
    - 1.6.8 Ikat
- 2. State wise name of different Indian traditional Textiles.

#### REFERENCE BOOKS

1 Hand Woven Fabrics of India Dhamija/ Jain D.N. Saraf 2 Indian Crafts 3 Traditional Indian Textiles Gillow John.

- 4 Masterpieces of Indian Textiles
- 5 Brocades of Ahmedabad
- 6 South Indian Traditions of Kalamkari
- 7 Costumes and Textiles of India
- 8 Miniature Painted Techniques
- 9 Kashmiri and its Shawls

Rustam J. Metha

Jhala, Uma De.

Lolikavaradrajew

Brij Bhushan

Sumo Hendra

Ananymous

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#### DESIGN AND FASHION FORECASTING

Course Code	TD 4005
Course Title	DESIGN AND FASHION FORECASTING
Number of Credits	4 (L-4, T-0, P-0)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

With the fast-paced nature of modern fashion production, trend forecasting has become a necessary tool to accurately predict the future needs and desire of consumers. It's also a way to generate fresh ideas for fashion Brands.

This trend forecasting course will provide you with the tools to research and spot trends, using a range of resources and visual imagery. Discover the importance of the impact trends. Explore the impact of lifestyle influences on fashion trends, from music to the arts, youth culture and social media. This online course will increase your awareness of trends, and their impact on the fashion industry as whole, and you'll hone the skills to spot them for yourself.

# **COURSE OUTCOMES-**

By the end of this course you will have;

- ❖ Learnt to identify a brand's sales model and target customer.
- Gained an understanding of how a brand will research trends for its target customer.
- ❖ Practiced predicting colour palettes from emerging trends.
- Developed your own macro-trend proposal.
- ❖ Learnt how contemporary life and cultural influences are impacting fashion trends.
- ❖ Gained insight into the roles of street style, bloggers and influencers, how they shape emerging trends, and how they can fit into marketing strategies.
- ❖ Gained some understanding of the contemporary debates around fashion trends, such as globalization and cultural appropriation.
- \* Researched trends using mood boards.
- Developed and understanding of the main data gathering fashion trend companies, how they operate, and how they affect the business.
- Received insider tips from your tutor, an industry expert.

#### **COURSE CONTENTS**

1.	Defini	tion of fashion and forecasting	6
2.	Fashio	on forecasting process	8
	a.	Fashion Trends and Cycle	
	b.	Fashion Forecasting	
	c.	Forecasting in apparel planning	
3.	Introdu	ucing Innovations	8

- a. Characteristics of an innovations
- b. The consumer adoption process: Fashion Fade and Classic
- c. Consumer segmentation
- 4. Direction Change

6

- a. Fashion Movement
- b. Theory of fashion change
- 5. Colour forecasting

- 8

- a. Dimensions of colour story
- b. Colour in marketing
- c. Consumer and psychology of colour
- d. Language of colour
- e. Forecasting with colour cycle
- f. Colour research
- 6. Design and Style direction
  - a. The fashion geography
  - b. Collection of run way
  - c. Different designer with the same design concept
- 7. Factors affecting the fashion forecasting

4

8. Fashion designers

4

#### **REFERENCE BOOKS:**

- 1. Fashion buying, Helen Goworek, Wiley-Blackwell.
- 2. Fashion art for the Fashion Industry, Rita Gersten, Fairchild Books.
- 3. Fashion Forecasting: a Mystery or a Method? Rita Perna, Images Publishing Group.
- 4. The Fashion Design Manual, Pamela Stecker, Macmillan Education.
- 5. The World of Federico Forquet: Italian Fashion, Interiors, Gardens Hardcover
- 6. The Fashion Book Hardcover Illustrated, by Phaidon Editors
- 7. The World's Most Influential Fashion Designers: Hidden Connections and Lasting
- 8. Legacies of Fashion's Iconic Creators Hard by Noel Palomo-lovinski (Author)

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# COMPUTER AIDED TEXTILE DESIGN - II LAB

Course Code	TD-4006
Course Title	COMPUTER AIDED TEXTILE DESIGN – II LAB
No. Of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

The course has been designed to provide a detailed introduction & study to different designing software.

The subject helps students to explore this creativity and innovation with innovative designs in context to CATD. Different software study helps to upgrade students skills towards present textile market scenario.

# **COURSE OUTCOMES-**

- Students will be able to learn sense of identity by using software towards design.
- Students will be able to connect with textile market
- Students will be able to become good communicators between industries & colleges.
- Students will be able to develop problem solving & designing skills.

# **COURSE CONTENTS**

1. Indesign master collection.	9
2. Tex Cad.	8
3. Corel/Photoshop.	8
4. Illustrator.	8
5. Design pamphlets, Brochures, Magazine by using studied software in reference to	)
Textile Design	6

# REFERENCE (Software)

- 1. In design Master Collection.
- 2. Tex Cad.
- 3. Illustrator.
- 4. Corel/Photoshop.

#### DYEING TECHNOLOGY II LAB

Course Code	TD 4007
Course Title	DYEING TECHNOLOGY-II LAB
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Dyeing is the application of dyes or pigments on textile material such as fibre, yarns and fabrics with the goal of colour with desired colour fastness. Before dyeing pre-treatments of dyeing such as desizing, scouring, bleaching and mercerization play a vital role in processing. Dyeing process involves interaction between the dye and the fibre as well as the movement of dye into the internal parts of the fibre. The textile designer should have a deep understanding of the application of dyes on various types of fabric; this helps in creating different designs in the printing process.

#### **COURSE OUTCOMES-**

- To learn about the necessity and application of various pre-treatment given to textile materials during the dyeing process.
- Understand the requirements of pre-treatment in the wet processing of textile materials.
- To understand the dyeing principal of various cellulosic, Protein and synthetic fibres.
- To Learn the different types of machinery used for dyeing and pre-treatments.
- Select the dyes and recipe for colouring the various fabrics.

# **PRACTICALS**

1.	Reactive dye on the cotton fabric in different shade percentage	6
2.	Acid dye on Wool Fabric in different shade percentage	4
3.	Acid dye on Silk Fabric in different shade percentage	4
4.	Sulphur dye on cotton fabric in different shade percentage	4
5.	Vat dye on cotton fabric in different shade percentage	4
6.	Disperse dye on Synthetic fabrics in different shade percentage	4
7.	Dve on Blended fabrics (At least two)	13

# **REFERENCE BOOKS:**

1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah

4. Chemistry of Dyes and Principle of Dyeing Shenai

5. Technology of Dyeing6. Technology of PrintingShenai

7. The Alternative Printing Handbook. Chris TreweekandZeitly

8 Block Printing on Textiles Crikson

9 Study of Contemporary Textiles Bijoy Chandra

Craft of India Block Ptg. Mohanti&Jagdish Prasad

10 Thomas and Hudson manual of Textile printing.

- 11 Textile printing.
- 12 Textile printing.
- 13 Dictionary of Dyes and Dyeing
- 14 Dyeing and Chemical Technology of Textile Fibres.
- 15 An Introduction of Textile Printing.
- 16 Handbook of Textile Fibres, Dyes and Finishes.
- 17 Textile Science
- 18 A Dictionary of Dyes and Dyeing
- 19 A Dictionary of Dyes and Dyeing
- 20 A Glimpse on Chemical Technology

Joyce storey Tim mara

K.G. Ponting TertmanGrittin

Clarke. Needles.

J.T. Marsh.

Bell and Hyman

Gooch.

R.P.Chakraverty

#### PRINTED FABRIC DESIGN - II LAB

Course Code	TD 4008
Course Title	Printed Fabric Designs - II LAB
Number of Credits	1.5(L-0, T-0, P-3)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

Printed fabric design is important because the student of textile design needs to be able to understand how to produce a design for a particular fabric type. In addition to this, they also need to be able to develop a textile design that is suitable for a given purpose.

Designer also required a good understanding of current trends colour awareness, suitability etc. in order that their designs are up-to-date and relevant for their and purpose.

This subject provides students with the right skill set to develop new design concept.

#### **COURSE OUTCOMES-**

After completing the course, student shall be able to-

- Able to develop innovative and creative designs for diverse Textile Market.
- Identify the influencing factors for the development and evolution of a specific printed fabric design.
- Understand the basic requirement for print design development.

#### **CONTENTS**

- 1- Understanding the different methods and styles of printing.
- 2- To understand the above, market survey should be done by students.
- 3- 6-A file of samples collected during market survey should be prepared by students for proper understanding of different designs.

# **PRACTICAL**

# **Suggested Exercises:**

#### 1- Gents Wear:

9

Theme:Free hand

For:Kurta

Fabric:Cotton

Method: Free hand

Colour scheme: Minimum Three Colour

# 2. Theme: Of Your Own Choice (Ozee shape)

10

For: Shirts Fabric:Poplin

Method: Screen Printing Colour Scheme: Own Choice

# 3- Summer Coat

10

Theme: Geometrical Pattern

Fabric:Cotton

Method: Screen Printing

Colour scheme: Cool Colours

4- Beach Wear 10

Theme: Fishes and Sea Animals Fabric: According to the Theme Method: Screen Printing

Colour scheme: Minimum Three Colours

Note: The Essential theory should be taught during the practical's.

# **REFERENCE BOOKS:**

1 Ideas and Techniques for Fabric Designing

2 Focus on Nature

3 Tropical Aquarium Fisher

4 Optical and Geometrical Pattern and Design

Lynda Flower

Wilson

Lamp Light

Spyros Horbis

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#### ENVIRONMENTAL STUDIES-II LAB

Course Code	TD-4009 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-II LAB
Number of Credits	1.0 (L-0, T-0, P-2)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

### **COURSE OUTCOMES-**

After completing the course the Learner will

- Understand the extent of Land pollution in their city.
- Understand the local birds, plants, insects.
- Importance of Afforestation (Plantation)
- Haveawareness towards Environment

#### **PRACTICALS**

- 1. Visit lo local area to document environmental assets-mountain/ desert / river / forest
- 2.Study of local birds, plants, insects
- 3.Plantation
- 4.Environmental awareness campaign through exhibitions

Note: After visits/ study, the students will prepare posters, charts, reports for exhibitions/ presentations.



#### TRADITIONAL INDIAN TEXTILES -II LAB

Course Code	TD 4010
Course Title	TRADITIONAL INDIAN TEXTILES –II LAB
Number of Credits	2 (L-0, T-0, P-4)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

"Tradition" is what going on since long. Traditional textiles in fact create a ground for current textiles. With time, taste and liking changes that make influence on designs and usually the changed aspects of a design are something used on traditions.

India has been so rich in traditional textiles that even today we find impact of these textiles not only in our home market but also in the world market; hence the students must be aware of traditional textiles.

#### **COURSE OUTCOMES-**

- Be able to appreciate traditional textiles of India viz a viz their material, colours, texture and motifs
- Be able to identify and appreciate various Indian traditional crafts/garments and accessories
- Understand the importance of textile crafts with the historical perspective, the impact of modernization and their contemporary status.
- Be able to apply Indian traditional designs and motifs for contemporary designs
- Be able to identify traditional Indian textiles and their product diversification in the local market

#### **PRACTICALS**

- 1. Students shall prepare a sample life by collecting 5 motifs of each topic.
- 2. Exercises –

2.1	Baluchar	10
2.2	Kashmiri embroidery	12
2.3	Kalamkari	10
2.4	Sanganeri	10
2.5	Bandhini	10

# REFERENCE BOOKS

	Dhamija/ Jain
D.N. Saraf	
	Gillow John.
	Rustam J. Metha
	Jhala, Uma De.
nkari	Lolikavaradrajew
	Brij Bhushan
	Sumo Hendra
	Ananymous
	Irwin John.

#### DRAWING AND RENDERING-II LAB

Course Code	TD 4011
Course Title	DRAWING AND RENDERING-II LAB
Number of Credits	1.5 (L- <b>0</b> , T-0, P-3)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

Rendering is a process to make a drawing look more realistic and magnificent. It helps to learn and create drawings that inspire, studying this makes textile students more capable of creating excellent arts, it encompasses various techniques like adding colors, textures, shadows, Improved Illumination, and Shading, Reflection and Perspective, etc., it enhances student's ability to master the fundamentals of designs.

#### **COURSE OUTCOMES-**

- Through this students will be able to create and understand visualization of drawing.
- It helps to draw the three-dimensional designs by adding physical attributes and details by creating live images through various techniques like shading, texture, shadow & reflection.
- It would contain geometry, viewpoint, texture, lighting, and shading information as a description of the virtual scene.

#### **COURSE CONTENTS**

- 1. Cross Sectional Study of the Following with Pencil, Pen & Ink and Water Colours:- 12
- 1.1 Fruits
- 1.2 Vegetables
- 1.3 Dry Fruits.
- 2. Study of Different Body Part for Expression.

09

- 3. Compositions: ----
- 3.1 Composition of Cross Sectioned forms from Design Point of view with water and poster colour 09
- 3.2 compositions of cartoons with Pencil, Pen & Ink and Water Colour.

NOTE: A Sketch File for First and second Exercises shall be Maintained by Students having 3 drawings of each Topic with at least 3 Different Angles.

# REFERENCE BOOKS:

1. Herbs	Hemphill
2. How to Draw & Paint	Stan Smith
3. Water Colour and Pai	Ran Ruson.
4. The Thomson & Hudson manual	Gills & robert
Of rendering with pen and ink	
5 0 11 110	

5. Still life Fester series
6. How to draw: human figures Fester series
7. Modern Cartooning: Essential Christopher Hart

Techniques for Drawing

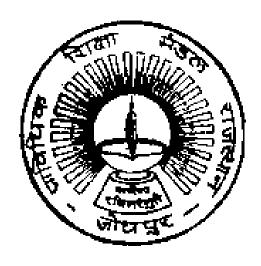
8. Flowers, Fruit & Vegetables Giovanni Civardi

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(V Semester) Prepared:2020-21 1

# **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

# **SEMESTER SCHEME-2020-21**



# **V SEMESTER**

(SESSION 2022-2023 & ONWARDS)

#### PROFESSIONAL MANAGEMENT& ENTREPRENEURSHIP-I

Course Code	TD 5001 I (Common to all Branches of Non Engineering)
Course Title	Professional Management & Entrepreneurship-
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

#### **Course objective:**

To achieve the targets and goals in an organization, it is essential to have the knowledge of various facets of businesses and management. On the other hand, economic development of a nation much depends upon entrepreneurship development. With large pool of technically educated youth and open market system, a big number of youth can turn to be business ventures, generating employment opportunities and leading to better utilization of resources.

This course not only gives an insight into the basic concepts, principles and processes of management and business organizations but also understanding of different aspects of entrepreneurship development to young entrants.

#### **COURSE OUTCOMES**

On completion of the course student will be able to:

- 1. Get familiarize with basics of business organization and management
- 2. Acquire the essential knowledge required for becoming an entrepreneur

#### **COURSE CONTENTS**

# 1. Meaning and Scope of Business

- 1.1 Definition
  - 1.1.1 Profession
  - 1.1.2 Trade
  - 1.1.3 Industry
- 1.2 Objectives of business and profession

# 2. Types of Business Organization

- 2.1 Brief description
- 2.2 Advantages and disadvantages of
  - 2.2.1 Individual/Sole
  - 2.2.2 Partnership
  - 2.2.3 Cooperative
  - 2.2.4 Private and Public limited organizations
- 2.3 Organizational Charts
- 2.4 Business Ethics
  - Characteristics of small businesses

#### 3. Management Techniques

- 3.1 Leadership
- 3.2 Authority
- 3.3 Responsibility
- 3.4 Functions of Management

#### 4. Human Resource Management

- 4.1 Functions & Importance
- 4.2 Human resource planning
- 4.3 Training
- 4.4 Mentoring
- 4.5 Motivating

#### 4.6 Grievances and their handling

# 5. Material Management

- 5.1 Duties of purchase department
- 5.2 Purchase order & Contracts
- 5.3 Tendering Procedure
- 5.4 Tenders and their types
- 5.5 Tender related costs
- 5.6 Store Keeping
  - 5.6.1 Objectives
  - 5.6.2 Receipt and issue of material
  - 5.6.3 Physical verification of store
  - 5.6.4 Disposal methods

# 6. Entrepreneurship

- 6.1 Introduction, scope and need
- 6.2 Characteristics of Entrepreneurship
- 6.3 Classification of Industries
- 6.4 Types of Industries
- 6.5 Industrial Policy

# 7. Entrepreneurship Support Systems

- 7.1 Institutional support from state and central organizations viz NSIC, SIDO, KVIC, DIC, SIS SIDBI, SFC, RFC etc
- 7.2 Loan/credit facilities by banks and financial institutions
- 7.3 Facilities to Women entrepreneurs
- 7.4 Important legislations (Factory Act, Minimum Wage Act, Workmen Compensation Act etc)

#### REFERENCES:

- 1. Industrial Engineering and Management, O P Khanna
- 2. Handbook of Small Scale Industry by P M Bhandari
- 3. Entrepreneurial Development, S & Khanka, S Chand
- 4. Industrial Engineering and Management, Sharma and Banga
- 5. Entrepreneurial Development Dr S S Khanka, S Chand Publishing
- 6. Management and Entrepreneurship, V K Sharma and O P Harkut, Scientific Publishers
- 7. Entrepreneurship Development Handbook, O P Harkut and J P Vaishnav, Scientific Publishers
- 8. Entrepreneurship Development And Management, J S Narang, Krishan Lal, V Dalal, Dhanpat Rai

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3

#### PRINTING TECHNOLOGY -I

Course Code	TD 5002
Course Title	Printing Technology- I
Number of Credits	2 (L-2, T-0, P-0)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Textile printing is the process of applying colour to fabric in definite patterns or designs which plays vital role in the decoration of fabric. All design comes on the fabric by means of printing therefore textile designer have to know the styles and methods of printing to apply his design to decorate the fabric.

# **COURSE OUTCOMES-**

After successful completion of this subject, the learner will be able to

- Role of different printing ingredient in printing paste
- Various printing style used in fabric printing
- Different methods of fabric printing
- Printing on different quality of fabric with different dye

7. Printing of protein fiber i.e. Wool and silk with different dye

#### **CONTENTS**

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6
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#### DEFEDENCE ROOKS

14 Dyeing and Chemical Technology

	REFERENCE BOOKS:	
1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah
4.	Chemistry of Dyes and Principle of Dyeing	Shenai
5.	Technology of Dyeing	Shenai
6.	Technology of Printing	Shenai
7.	The Alternative Printing Handbook.	Chris TreweekandZe
8	Block Printing on Textiles	Crikson
9	Study of Contemporary Textiles	Bijoy Chandra
	Craft of India Block Ptg.	Mohanti&Jagdish Prasad
10	Thomas and Hudson manual of Textile printing.	
11	Textile printing.	Joyce storey
12	Textile printing.	Tim mara
13	Dictionary of Dyes and Dyeing	K.G. Ponting

TertmanGrittin

of Textile Fibres.

- 15 An Introduction of Textile Printing.
- 16 Handbook of Textile Fibres, Dyes and Finishes.
- 17 Textile Science
- 18 A Dictionary of Dyes and Dyeing
- 19 A Dictionary of Dyes and Dyeing
- 20 A Glimpse on Chemical Technology

Clarke.

Needles.

J.T. Marsh. Bell and Hyman

Gooch.

R.P.Chakraverty

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# STRUCTURAL TEXTILE DESIGN- IV

Course Code	TD 5003
Course Title	Structural Textile Design- IV
Number of Credits	4(L-4, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Structural fabric design is one of the most important part of Textile design in which the students have to learn and create designs for different woven fabrics, By learning the basics of weaving, students become aware of techniques of fabric construction Actually the techniques of dyeing and printing are applied mainly on constructed fabrics, hence the students should be able to construct at least basic fabrics so that they become aware of the designing of these fabrics.

#### **COURSE OUTCOMES**

After successful completion of this course, the students should be able to;

- Develop new weave structures.
- Create new structures using color and weave effect.
- Draw simple and compound structures
- Comparative study of weaves

Understand the fundaments of weave and their use

# **CONTENTS**

1.	Bedford cords	6
	1.1 Classification of Bedford cords	
	1.2 Plain face Bedford cord	
	1.3 Twill face Bedford cord	
2.	Welts and Piques	6
	2.1 Classification of welt structure	
	2.2 Ordinary welt structure	
4	2.3 Weft wedded welts	
	2.4 Fast back welt	
3.	Backed Fabric	6
•	3.1 Principle of construction	
	3.2 Warp backed fabrics	
	3.3 Weft backed fabrics	
	3.4 Comparisons between warp and weft backed fabric	
4.	Pile fabrics	10
	4.1 Classification of pile fabric	
	4.2 Weft pile fabric	
	4.3 Types of velveteen or weft pile fabric	

- 4.4 Warp pile fabric
- 4.5 Turkish or Terry pile
- 4.6 Pile formation in terry
- 4.7 Various types of terry weave design

# 5. Extra warp and extra weft figured fabrics

- 5.1 Methods of production
- 5.2 Method of removal surplus figuring thread
- 5.3 Figuring with extra single colour and double colour warp thread
- 5.4 Figuring with extra single colour and double colour weft thread
- 5.5 Comparisons between extra warp and extra weft figuring

#### 6. **Double cloth**

- 6.1 Classification of double cloth fabric
- 6.2 Self stitched double cloth
- 6.3 Double cloth with wedded thread
- 6.4 Centre stitched double cloth

# 7. Basic aspects of colour and its effect on weave

- 7.1 Factors affecting luster of textile material
- 7.2 Colour and weave effect
- 7.3 Classification of Colour and weave effect
- 7.4 Effect produced by simple colour and weave combination

#### **REFERENCE BOOKS:**

- 1. Principles of Weaving Mark Rebinson
- 2. Watson Textile Design and Colour Z.Gresicki
- 3. Textiles Fibre to FabrisBeanaredP.Corbman
- 4. Under Standing Textiles. G.Tortora.
- 5. Handloom Weaving Technology Allen A. Fannin.
- 6. Fabric Structure and Design, क्तुण टण नइतंउंदपंउ
- 7. Fabric forming by Hasmukhrai
- 8. Weaving calculation by R. Sen Gupta
- 9. Principle of weaving by R. Marks and ATC Robinson
- 10. Watson's Advance Textile Design by Z.J. Grdsicki

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3

#### FASHION DESIGN AND ILLUSTRATION-1

Course Code	TD 5004
Course Title	Fashion Design And Illustration-1
Number of Credits	1 (L-1, T-0, P-0)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

- 1. To provide knowledge of various fashion trends and textiles.
- 2. To inculcate the interest and to develop a sense of appreciation and creative expression in selection of ready-made clothes.
- 3. To enable the students to develop interest in research for various projects and develop appropriate skills in designing dresses.
- 4. To enable students to acquire basic knowledge about textiles necessary to select better fabrics for Apparel and designing clothes.

#### **COURSE OUTCOMES-**

- 1. Students have a command of drawing the human figure and environment, from imagination and observation.
- 2. Students are able to execute drawings and finished illustrations that demonstrate expertise in dynamic composition, spatial relationship, and design.
- 3. Develop and/or augment a personal voice in the students' art through the exploration of a variety of visual vocabularies to express a unique perspective.
- 4. Student demonstrates a unique voice, vision and style to execute finished illustrations.

# COURSE CONTENTS

- 1. Introduction to fashion Illustration and brief history of fashion illustration
- 2. Fashion Figure,

Ctudy of vanious managing

- 2.1 Study of various proportions,
- 2.2 The balance line in drawing figures, gestures and movements.
- 2.3 8 head, 10 head, 12 head figures,
- 2.4 The fashion face, arms, legs, Hands and feet.
  - 2.5 Illustrating male figure and children,
  - 2.6 Figure analysis,
  - 2.7 Body types,
  - 2.8 Designing for diverse body types and ages
- 3. Fashion terminologies fashion, fad, cycle, style, classics, boutique, trend, haute couture, designer, prêt a porter, silhouette, taste, Fashion icon, fashion follower, muse

4

#### **REFERENCES-**

- 1. Design Essentials: 100 Principles of Fashion Design.
- 1. Fashion Design: Process, Innovation and Practice (2<sup>nd</sup> Edition)
- 2. 9 Heads: A Guide to Drawing Fashion (3<sup>rd</sup> Edition)
- 3. Fashion Sketchbook (6<sup>th</sup> Edition)
- 4. Fashion Design Course: Principles, Practice and Techniques: The Practical Guide for Aspiring Fashion Designers.
- 5. Allen and Seaman, "Fashion drawing- The Basic Principles", B. T Batsford, London,1994
- 6. Drake and Ireland, Patrick John, "Fashion Design Drawing and Presentation", B. T., Batsford, London, 1996
- 7. Nicholas, "Fashion illustrations", Thames and Hudson. London, J 994.
- 8. Seamn, Julian, "Professional Fashion Illustration". B. T. Batsford, London, 1995

#### **GARMENT TECHNOLOGY**

Course Code	TD 5005
Course Title	Garment Technology
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Some of the diploma holder in textile design may also find placement in the garment house. the garment construction includes various types of stitches, seams, patterns, spreading process, cutting process, fusing, pressing and packaging. The basic concepts of garment manufacturing are included in this subject.

# **COURSE OUTCOMES-**

- To understand the basic skill of pattern making.
- To understand the basic skill of cutting.
- To understand the basic or fabric spreading process
- To stitch different stitch and seams on sewing machine.
- To finish edges with hand and machine
- To understand basic of fusing ,pressing and packing
- To understand the basic concept of fabric costing

# CONTENT

1.	Types of fabric used for garment	3
	1.1 Fabric characteristics for garment manufacturing	
	1.2 Fabric selection and sourcing for garment making	
	1.3 Fabric inspection system	
2.	Types of stitches	3
3.	Types of seam	3
4.	Edge finishes	3
5.	Pattern making	5
	5.1 Body measurement and body anatomy	
	5.2 Types of pattern	
	5.3 Pattern making tools	
6.	Fabric spreading	4
	6.1. Marker planning, marker types and methods of marker planning	
	6.2. Types of spreading	
	6.3. Objectives of spreading and methods	
7.	Cutting	6
	7.1. Object of cutting	
	7.2. Methods of cutting and tools of cutting	
	7.3 Types of cutting machine	

4. Pattern cutting making up by Martin M Shoben and Janet P ward

5. Cutting and Sewing theory by Gaytri Verma and Kapil Dev

#### COMPUTER AIDED TEXTILE DESIGN – III LAB

Course Code	TD-5006
Course Title	Computer Aided Textile Design – III Lab
No. Of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

Any part of the design process that can utilize the computer as a tool fits under the CAD Umbrella. CATD has brought about a revolution in the textile industry. The time consuming and cumbersome process of textile designing has made easier by CAD.

The subject helps the students to use the CAD/CAM system for Design presentation and production purposes. Software applications like Corel draw together with Photoshop helps the students to utilize their creativity into innovative designs.

#### **COURSE OUTCOMES-**

Throughout this course, some learning should be acquired by the students that meet the objective of this course –

- The students should be able to define the designing tool, objects and the software property according to market demand.
- The students should be able to analyze and justified the different menus of design tools and able to connect with textile design.
- The students should be able to design and draw motifs with the help of softwareand tools.

# **COURSE CONTENTS**

- 1. Design Motifs and Coordinates for seamless designs by taking any 10 themes of "Printed fabric design". (Make 20 layouts 2 for each theme).
  - Software to be used Corel draw or Photoshop.

18

21

- 2. Design Draft and Peg plan for different weaves—
  - 2.1.Plain weave
  - 2.2.Twill weave
  - 2.3.Stain weave
  - 2.4. Derivation of plain weave

#### Note:-

- 1. Execute these weaves in form of Print design.
- 2. Color separation for different fabric.
- 3. Formation of New Design in form of different given weave.

#### REFERENCE BOOKS

- 1. Corel draw X8,the official guide.
- 2. Corel draw X6 Official guide (By Gary David Button)
- 3. "Bring it home will Corel draw" (By Roger Won bolt)
- 4. Adobe Photoshop (Classroom in book the official training workbook from Adobe AndrewfaultierConradChaves)
- 5. Color match
- 6. Global Ten CAD Professional
- 7. Tex Style (Printing design)

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#### PRINTING TECHNOLOGY- I LAB

Course Code	TD 5007
Course Title	Printing Technology I-Lab
Number of Credits	1.5(L-0, T-0, P-3)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Textile printing is the process of applying colour to fabric in definite patterns or designs which plays vital role in the decoration of fabric. All design comes on the fabric by means of printing therefore textile designer have to know the styles and methods of printing to apply his design to decorate the fabric.

#### **COURSE OUTCOMES-**

After successful completion of this subject, the learner will be able to:

- Role of different printing ingredient in printing paste
- Various printing style used in fabric printing
- Different methods of fabric printing
- Printing on different quality of fabric with different dyes

# **PRACTICALS**

- 1. Students shall prepare a file containing different samples of block printing with different dyes and pigments.
- 2. Printing of the following articles with Block printing method-
  - 2.1. Cushion cover/ sofa backs
  - 2.2. Table Cover/ dress material

#### **REFERENCE BOOKS:**

1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah
4.	Chemistry of Dyes and Principle of Dyeing	Shenai

5. Technology of Dyeing6. Technology of PrintingShenai

7. The Alternative Printing Handbook. Chris TreweekandZeitly

8 Block Printing on Textiles Crikson

9 Study of Contemporary Textiles Bijoy Chandra
Craft of India Block Ptg. Bijoy Chandra
Mohanti&Jagdish Prasad

10 Thomas and Hudson manual of Textile printing.

Textile printing.
 Textile printing.
 Dictionary of Dyes and Dyeing
 Dyeing and Chemical Technology
 TertmanGrittin

of Textile Fibres.

15 An Introduction of Textile Printing.

16 Handbook of Textile Fibres, Dyes and Finishes.

17 Textile Science

18 A Dictionary of Dyes and Dyeing

19 A Dictionary of Dyes and Dyeing

20 A Glimpse on Chemical Technology

Clarke.

Needles.

J.T. Marsh.

Bell and Hyman

Gooch.

R.P.Chakraverty

#### PRINTED FABRIC DESIGN -III LAB

Course Code	TD 5008
Course Title	Printed Fabric Design -III Lab
Number of Credits	2.5 (L-0, T-0, P-5)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

The last and ultimate aim of Textile Design course is to give best designers to the world. This subject is essence of all. As a designer of textile, a person has to keep a lot of factors in mind like theme, weather, time, fabric countries use, fashion trends, customer's choice etc. and has to get perfect ideas by keeping the above mentioned factors in mind. Students may start their own design studio or can get practical image of their designs by selling them to different printing mills and units.

#### **COURSE OUTCOMES-**

- It help student to create design that are unique, effective and memorable.
- It's an internal ability to come up with new and inventive ways to fulfill a need.
- It is a process of skill development, exposed to new design avenues.
- It helps students to learn customize designing and build their own business.

#### **PRACTICALS**

#### 1. Practices:

- 1.1 Make 2-2 repeat units on following bases and placements
- 1.1.1 Unit Repeating Design
- 1.1.2 The drop device:
- 1.1.2.1 Half (1/2) drop
- 1.1.2.2 One third (1/3) drop
- 1.1.2.3 One quarter (1/4) drop
- 1.1.3 The diamond.
- 1.1.4 The ozee (open ozee, interfacing ozee closed open ozee)
- 1.1.5 The rectangle
- 1.1.6 The sateen basis method

#### 2 Instructions:

- 2.1 Every theme of the design must have at least three colour schemes for the final selected design in one repeat unit.
- 2.2 Every theme of the design should be in practical No.l modern style and it should be in traditional style

#### **3 Practice Exercise:**

# 3.1 Theme: Indian traditional design

For: Dress material Fabric: Cotton

Colour scheme: your own choice

Method: block printing

15

Textile DesignV Semester	Prepared 2021-22
3.2 Theme: anything from nature	15
For: upholstery	
Fabric: Tapestry cloth	
Color scheme: Minimum four colour	
Method: screen printing	
3.3 Theme: Leaves	11
For: Office curtain	
Fabric: satin cotten	
Color scheme: Minimum five colour	
Method: screen printing	
3.4 Theme: Geometrical pattern	12
For: Bed cover	
Fabric: Plain cotton sheet	
Color scheme: Minimum three colour	
Method: block printing	
3.5 Theme: Musical instrument	12
For: Bed cover	
Fabric: Long cloth	
Color scheme: Your own choice	
Method: block printing	
Note: Size of themes from 3.1 to 3.5 should not be less than	09"x09".
REFERENCE BOOKS :	

# REFERENCE BOOKS:

1. Master pieces of Indian textile -Rustom J. Metha 2. Textile of india – B.A Shenai 3. Traditional Indian textile-Colilloeri john 4. Paradise as a garden – moynihav 5. Optical and Geometrical Patterns and Designs -Syrose

6. Silver Study of Design -Mark Truner

7. The Family Encyclopedia of Animal Life.

8. Birds Family of the World -Harrison Abrown

9. Focus on nature faher

#### FREE HAND DRAWING & PAINTING- I LAB

Course Code	TD 5009
Course Title	Free Hand Drawing & Painting- ILab
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

Free Hand Painting 1s a subject 1or which students require full confidence in their hands. After learning almost all type of motifs and figure, students are how capable to go hand painting as they have learnt all the forms naturally as well as creatively. After studying the basic forms and shapes, natural and geometrical in IInd year. We move to the human figures and animated forms in IInd year. The study of human figures is essential as parts of designing likewise animated figures are becoming more important now days.

#### **COURSE OUTCOMES-**

Throughout freehand drawing course, some learning outcomes should be acquired by the students that meet the objectives of this course:

- The students shout be able to observe the shapes and objects, and record the scale and proportion and dimension accurately.
- The students shout be able to analyze and measure the relative proportions of the shapes and objects in a composition.
- They should be able to analyze the location of the lines in relation to each other in the model, and analyze the angles of the vanishing points.
- The students shout be able to draw sketch quickly.
- The students shout be able to present their drawing by hatching techniques, besides, show shadow, shade and texture of objects.
- Chose the suitable color plan for the project.
- Lear the basics of mixing the colors.
- Illustrating shades and shadows in the drawing.

#### CONTENTS

1 Six greeting cards of different theme.	13
2 A set of dining table mat in traditional pattern.	13
3 Saree painting in floral pattern.	13

#### **REFERENCE BOOKS**

1 Hand Woven Fabrics of India		Dhamija/ Jain
2 Indian Crafts	D.N. Saraf	
3 Traditional Indian Textiles		Gillow John.
4 Masterpieces of Indian Textiles		Rustam J. Metha
5 Brocades of Ahmedabad		Jhala, Uma De.

6 South Indian Traditions of Kalamkari

7 Costumes and Textiles of India

8 Miniature Painted Techniques

9 Kashmiri and its Shawls

10 Indian Textiles

Lolikavaradrajew Brij Bhushan Sumo Hendra Ananymous Irwin John.

#### FASHION DESIGNAND ILLUSTRATION- I LAB

Course Code	TD-5010
Course Title	Fashion Design And Illustration -I Lab
No. Of Credits	2 (L-, T-0, P-4)
Prerequisites	None

#### **COURSE LEARNING OBJECTIVES**

- 1. To provide knowledge of various fashion trends and textiles.
- 2. To inculcate the interest and to develop a sense of appreciation and creative expression in selection of ready-made clothes.
- 3. To enable the students to develop interest in research for various projects and develop appropriate skills in designing dresses.
- 4. To enable students to acquire basic knowledge about textiles necessary to select better fabrics for Apparel and designing clothes.

#### **COURSE OUTCOMES-**

- 1. Students have a command of drawing the human figure and environment, from imagination and observation.
- 2. Students are able to execute drawings and finished illustrations that demonstrate expertise in dynamic composition, spatial relationship, and design.
- 3. Develop and/or augment a personal voice in the students' art through the exploration of a variety of visual vocabularies to express a unique perspective.
- 4. Student demonstrates a unique voice, vision and style to execute finished illustrations.

COURSE CONTENTS-	
1. Line Sketches in Pencil and Ink:	16
1.1 Boys and Girls	
1.2 Ladies	
1.3 Gents	
	0
2. Brief idea about Drawing Tools and Materials	8
	0
3. Sketches of:	8
3.1 Flowers and Twigs	
3,2 Trees and Foliage	
4. Sketches Related to Boys / Girls/ Ladies / Gents:	20
4.1 Necklines	
4.2 Collars	
4.3 Sleeves	
4.4 Yokes	
4.5 Bows and Ties	
4.6 Caps and Hats	
4.7 Pockets	
4.8 Belts	

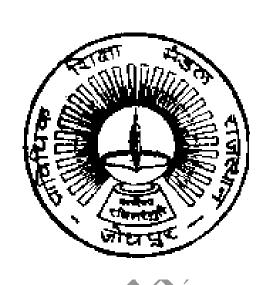
# REFERECE BOOKS

- 1. The Art of Costume Design Marilyn Sotto
- 2. How'to Draw and Paint Fashions Walter T. Faster
- 3. Children's Clothes Conran Actopus
- 4. Kiddys Fashion Wongs Wary Press
- 5. Men's Hi Fashion Poineer Books Co.
- 6. Women's Hi Fashion Poineer Books Co.
- 7. Mccall's Vogue and Simplicity (Monthly Maganizes)
- 8. Kiddy Vol 1 to 25

VI Semester Prepared 2020-21

# **GOVERNMENT OF RAJASTHAN**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR

# **SEMESTER SCHEME-2020-21**



# **VI SEMESTER**

(SESSION 2022-2023 & ONWARDS)

#### PROFESSIONAL MANAGEMENT & ENTREPRENEURSHIP-II

Course Code	TD 6001
Course Title	Professional Management& Entrepreneurship-II
	(Common to all branches of Non Engineering)
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

#### **Course objective:**

To achieve the targets and goals in an organization, it is essential to have the knowledge of various facets of businesses and management. On the other hand, economic development of a nation much depends upon entrepreneurship development. With large pool of technically educated youth and open market system, a big number of youth can turn to be business ventures, generating employment opportunities and leading to better utilization of resources.

This course not only gives an insight into the basic concepts, principles and processes of management and business organizations but also understanding of different aspects of entrepreneurship development to young entrants.

#### **Course Outcomes**

On completion of the course student will be able to:

- 1. get familiarize with basics of business organization and management
- 2. acquire the essential knowledge required for becoming an entrepreneur.

#### **COURSE CONTENTS**

# 1. Financial Management

- 1.1 Sources of Finance
- 1.2 Cash and Credit
- 1.3 Cheque and Draft
- 1.4 Brief idea of cost accounting

# 2. Tax and Insurance

- 2.1 Brief idea about direct and indirect taxes
- 2.2 Industrial insurance

#### 3. Quality Management

- 3.1 Concept of quality
- 3.2 Quality Assurance
- 3.3 Online & offline quality control
- 3.4 Factors responsible for deviation
- 3.5 ISO 9000 model
- 3.6 Total quality management.

# 4. Sales and Marketing Management

- 4.1 Concept of Marketing
- 4.2 Marketing Mix (4P)
- 4.3 Advertising and Sales Promotion
- 4.3 Sales Vs Marketing
- 4.4 Functions of marketing department
- 4.5 After sales services

# 5. Setting up an SSI

5.1 Steps in setting up an SSI

- 5.2 Pre market survey
- 5.3 Product Identification
- 5.4 Site selection & land allotment
- 5.5 Procurement of raw materials
- 5.6 Establishment of Machinery

#### 6. Project Report

- 6.1 Procedure of preparing a project report
- 6.2 Format of a project report
- 6.3 Analysis of sample project reports

Important: An entrepreneurship camp can be arranged by the institutions stretched over 3-4 days with the help of agencies such as RIICO, DST, RajCON, DOI, banks etc. However no question should be asked in examination from this event.

#### **REFERENCES:**

- 1. Industrial Engineering and Management, O P Khanna
- 2. Handbook of Small Scale Industry by P M Bhandari
- 3. Entrepreneurial Development, S S Khanka, S Chand
- 4. Total Quality Management, M P Poonia and S C Sharma
- 5. Industrial Engineering and Management, Sharma and Banga
- 6. Entrepreneurial Development Dr S S Khanka, S Chand Publishing
- 7. Management and Entrepreneurship, V K Sharma and O P Harkut, Scientific Publishers
- 8. Entrepreneurship Development Handbook, O P Harkut and J P Vaishnav, Scientific Publishers
- 9. Entrepreneurship Development And Management, J S Narang, Krishan Lal, V Dalal, Dhanpat RaiNote: Students are advised to supplement their readings on latest development in entrepreneurship through internet and open courseware.

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# PRINTING TECHNOLOGY II

Course Code	TD 6002
Course Title	PRINTING TECHNOLOGY II
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Textile printing is the process of applying colour to fabric in definite patterns or designs which plays vital role in the decoration of fabric. All design comes on the fabric by means of printing therefore textile designer have to know the styles and methods of printing to apply his design to decorate the fabric.

# **COURSE OUTCOMES-**

After successful completion of this subject, the learner will be able to:

- Understood the various aspects of screen printings
- Different printing methods used in fabric printing
- Printing on different quality of fabric with different dyes
- After treatment of fabric printing and their effects

#### **COURSE CONTENTS**

1.	Screen Printing	15
	1.1. Equipment and materials	
	1.2. Types of screen	
	1.3. Methods of screen making	
	1.4. Processes of hand, Flat bed and Rotary screen printing	
	1.5. Advantages and disadvantages of screen printing	
	1.6. Faults in screen printing process	
2.	Roller printing method	6
<b>3.</b>	Transfer printing method	6
4.	Printing of Synthetic fibre and its blend with different dyes	6
<b>5.</b>	After Treatments of printed fabrics.	6

#### REFERÊNCE BOOKS:

	REPERENCE BOOKS.	
1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah
4.	Chemistry of Dyes and Principle of Dyeing	Shenai
5.	Technology of Dyeing	Shenai
6.	Technology of Printing	Shenai
7.	The Alternative Printing Handbook.	Chris TreweekandZeitly
8	Block Printing on Textiles	Crikson
9	Study of Contemporary Textiles	Bijoy Chandra

Craft of India Block Ptg.

- 10 Thomas and Hudson manual of Textile printing.
- 11 Textile printing.
- 12 Textile printing.
- 13 Dictionary of Dyes and Dyeing
- 14 Dyeing and Chemical Technology of Textile Fibres.
- 15 An Introduction of Textile Printing.
- 16 Handbook of Textile Fibres, Dyes and Finishes.
- 17 Textile Science
- 18 A Dictionary of Dyes and Dyeing
- 19 A Dictionary of Dyes and Dyeing
- 20 A Glimpse on Chemical Technology

Mohanti&Jagdish Prasad

Joyce storey Tim mara K.G. Ponting

TertmanGrittin

Clarke. Needles.

> J.T. Marsh. Bell and Hyman Gooch.

R.P.Chakraverty

#### **TEXTILE TESTING**

Course Code	TD 6003
Course Title	Textile Testing
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None
Course Category	Textile Design

# **COURSE LEARNING OBJECTIVES**

The diploma holders in textile design have to ensure quality at all levels. The skill in testing of materials and textiles of various stages of production and finishing are essential to be developed in the students. To train the students in assessment of performance characteristics of various textile material i.e. fiber, yarn and fabrics the subject of textile testing has been included in curriculum.

#### **COURSE OUTCOMES-**

Upon completion of the subject, student will be able to:

3.1 Yarn numbering system

- Identify, select and access (source) the most appropriate international standard tests and test methods to access the serviceability of specific textile product and its enduse.
- Conduct (apply) the standard quality control tests appropriate to textile product and interpret and evaluate the results in terms of relevant national and international performance requirements, standards and specifications for different textile products.
- Apply critical and creative thinking for identifying, analyzing and solving quality and general technical problem related to textile products.
- Competently and professionally present quality assessment information and results and solutions to quality related problems and ways of improving quality.

CONTENTS	
1.Sampling	8
1.1 Need of textile testing	
1.2 Standard atmospheric condition	
1.3 Sampling: Aim of sampling	
1.4 Types of sampling: Random sampling, Bias sampling, Numerical sampling,	
2. Fiber Testing	8
2.1Fiber length measurement: importance, fiber parameter	
2.2 Fiber fineness measurement and its importance	
2.3 Fiber maturity and its importance	
2.4Fiber moisture regain	8
3 Yarn count Twist and Irregularity	

- 3.2 Yarn twist testing: types of twist, effect of twist on fabric property, different twist testing methods
- 3.3 Testing of evenness of yarn and its importance
- 3.4 CSP
- 4. Fabric Testing

15

- 4.1 Quality parameters of fabric
- 4.2 Fabric thickness testing
- 4.3 Pilling of fabrics and its responsible factors
- 4.4 Fabric abrasion resistance
- 4.5 Parameters affecting handle of fabric
- 4.6 Crease resistance and crease recovery
- 4.7 Flame resistance
- 4.8 Drape
- 4.9 Tensile property

# **REFERENCES**

- 1. Principles of Textile Testing by JE Booth
- 2. Textile Testing by P Anagappan, R Gopalakrishnnan
- 3. Hand book of Textile Testing and Quality Control by Grover and Hamby

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# FASHION DESIGN AND ILLUSTRATION-II

Course Code	TD 6004
Course Title	Fashion Design And Illustration-II
Number of Credits	1 (L-1, T-0, P-0)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

- 1. To provide knowledge of various fashion trends and textiles.
- 2. To inculcate the interest and to develop a sense of appreciation and creative expression in selection of ready-made clothes.
- 3. To enable the students to develop interest in research for various projects and develop appropriate skills in designing dresses.
- 4. To enable students to acquire basic knowledge about textiles necessary to select better fabrics for Apparel and designing clothes.

# **COURSE OUTCOMES-**

- 1. Students have a command of drawing the human figure and environment, from imagination and observation.
- 2. Students are able to execute drawings and finished illustrations that demonstrate expertise in dynamic composition, spatial relationship, and design.
- 3. Develop and/or augment a personal voice in the students' art through the exploration of a variety of visual vocabularies to express a unique perspective.
- 4. Student demonstrates a unique voice, vision and style to execute finished illustrations.

# **COURSE CONTENTS-**

- 1. Origins of fashion
  - 1.1 Clothing as modesty1.2 Fashion as status symbol
  - 1.3The major fashion centers and Fashion theories
  - 2. Garment Features
    - 2.1 Types of silhouettes, collars
    - 2.2 Yoke variations, pockets
    - 2.3 Cuffs, sleeves Trousers
  - 3. Fashion Psychology
    - Role of clothing in physical, social, psychological
    - 3.2 Cultural scenario, Human behavior and clothing
    - 3.3 Clothing and gender differentiation
  - 4. Fashion designers: both Indian and International

# REFERENCE-

- 1.Design Essentials: 100 Principles of Fashion Design.
- 2. Fashion Design: Process, Innovation and Practice (2<sup>nd</sup> Edition)
- 3. 9 Heads: A Guide to Drawing Fashion (3<sup>rd</sup> Edition)
- 4. Fashion Sketchbook (6<sup>th</sup> Edition)
- 5. Fashion Design Course: Principles, Practice and Techniques: The Practical Guide for Aspiring Fashion Designers.

- 6. Allen and Seaman, "Fashion drawing- The Basic Principles", B. T Batsford, London, 1994
- 7. Drake and Ireland, Patrick John, "Fashion Design Drawing and Presentation", B. T, Batsford, London, 1996
- 8. Nicholas, "Fashion illustrations", Thames and Hudson. London, J 994
- 9. Seamn, Julian, "Professional Fashion Illustration". B. T. Batsford, London, 1995

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#### TEXTILE TESTING LAB

Course Code	TD 6005
Course Title	Textile Testing lab
Number of Credits	0.5(L-0, T-0, P-1)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

To impart the knowledge about the physical properties of textile and their testing procedures and to develop and understanding of the principals involved in testing of performance and colour fastness properties of textile fabrics.

# **COURSE OUTCOMES-**

Student will be able to-

- Apply the knowledge about various procedures at yarn stage and related to fabric performance properties.
- Relate the principles of fabric testing procedures with the functional, performance, aesthetic and comfort properties of textiles and fabrics.

# **PRACTICALS**

1.	To identify the yarn count of given sample.	1
2.	To measure the twist and twist contraction in given yarn sample.	2
3.	To identify the crimp% of given fabric sample.	1
4.	To measure the crease recovery of given fabric sample.	1
5.	To identify the moisture regain in given fabric sample.	2
6.	To measure the thickness of given fabric sample	1
7.	To measure the tearing strength of given fabric sample.	1
8.	To measure the drape of given fabric sample.	1
9.	To perform the pilling test on given fabric sample.	2
10	. To measure the abrasion resistance of given fabric.	1

# REFERENCES

- 4. Principles of Textile Testing by JE Booth
- 5. Textile Testing by P Anagappan, R Gopalakrishnnan
- 6. Hand book of Textile Testing and Quality Control by Grover and Hamby

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#### COMPUTER AIDED TEXTILE DESIGN – IV LAB

Course Code	TD-6006
Course Title	COMPUTER AIDED TEXTILE DESIGN – IV LAB
No. Of Credits	1.5(L-0, T-0, P-3)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

CAD has brought a revolution in the textile and textile industry the time consuming and cumbersome process of textile designing has been made easier by CAD by using CAD software technology textile designer can easily create different types of clothing design within a very short period of time.

Students learn graphical representation so accurately generated that they can nearly view the actual product on the screen. Students can shorter the development time of a product earlier, it can be introduced in the market and the product may have an extended life span if built-in quality of it is up to the mark.

# **COURSE OUTCOMES-**

Students will be able to -

- Apply the knowledge about various CATD procedures at design stage and relate it to fabric performance and its printing design.
- Relate the principles of printing design with functional performance, aesthetic and comfort software.
- Understand key techniques of different CATD software.
- Gain knowledge to being the tools of different textile software.
- Draw conditions and interpretations from the analysis of data using various software.

# **COURSE CONTENTS**

1. Mapping for home furnishing collection as various textile design articles.

Note:- Design 5 Home furnishing coordinates its design composition

- Use of Digitizers compulsory.
- Sketch design is compulsory.
- Appropriate use of software.
- 2. Design complete folio by using appropriate textile software.
- 3. Stripes and Checks design formation with the help of proper Design, Draft and Peg plan \*Weave coordination should be properly elaborated [Dobby Jacquard software]
- 4. Design various Designs for 10 layouts of Saris.
  - Traditional Sari themes to be taken.
  - Digitizer to be used.
- 5. Understand access to internet, send or receive emails, searching and managing data. 6 **REFERENCE** 
  - 1. Tex CAD Software
  - 2. Dobby Jacquard Software
  - 3. Illustrator
  - 4. Photoshop
  - 5. Corel Draw
  - 6. Indesign

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# PRINTING TECHNOLOGY II LAB

Course Code	TD 6007
Course Title	PRINTING TECHNOLOGY II LAB
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	PRINTING TECHNOLOGY I LAB

# **COURSE LEARNING OBJECTIVES**

Textile printing is the process of applying colour to fabric in definite patterns or designs which plays vital role in the decoration of fabric. All design comes on the fabric by means of printing therefore textile designer have to know the styles and methods of printing to apply his design to decorate the fabric.

# **COURSE OUTCOMES-**

After successful completion of this subject, the learner will be able to:

- Understood the various aspects of screen printings
- Different printing methods used in fabric printing
- Printing on different quality of fabric with different dyes
- After treatment of fabric printing and their effects

# **PRACTICALS**

1.	Single colour screen printing on silk scarf with acid dye.	13
2.	Double colour screen printing on cots wool fabric with pigments	13
3.	Triple colour screen printing on salwar suit with rapid and indigosol dyes	13

#### DEFEDENCE DOOKS.

15 An Introduction of Textile Printing.

	REFERENCE BOOKS:	
1.	Textile Science	Vilenski
2.	Chemistry of Textile Auxiliaries	Shenai
3.	Cotton Piece Dyeing	Gokhale and Shah
4.	Chemistry of Dyes and Principle of Dyeing	Shenai
5.	Technology of Dyeing	Shenai
6.	Technology of Printing	Shenai
7.	The Alternative Printing Handbook.	Chris TreweekandZeitly
8	Block Printing on Textiles	Crikson
9	Study of Contemporary Textiles	Bijoy Chandra
	Craft of India Block Ptg.	Mohanti&Jagdish Prasad
10	Thomas and Hudson manual of Textile printing.	
11	Textile printing.	Joyce storey
12	Textile printing.	Tim mara
13	Dictionary of Dyes and Dyeing	K.G. Ponting
14	Dyeing and Chemical Technology	TertmanGrittin
	of Textile Fibres.	

Clarke.

# Textile Design VI Semester

Prepared 2020-21

16 Handbook of Textile Fibres, Needles.

Dyes and Finishes.

17 Textile Science18 A Dictionary of Dyes and DyeingBell and Hy

18 A Dictionary of Dyes and Dyeing19 A Dictionary of Dyes and DyeingGooch.

20 A Glimpse on Chemical Technology R.P.Chakraverty

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#### PRINTED FABRIC DESIGN IV LAB

Course Code	TD 6008
Course Title	PRINTED FABRIC DESIGN IV LAB
Number of Credits	2.5 (L-0, T-0, P-5)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

The last and ultimate aim of Textile Design course is to give best designers to the world. This subject is essence of all. As a designer of textile, a person has to keep a lot of factors in mind like theme, weather, time, fabric countries, uses, fashion trends, customer's choice etc. and has to get perfect ideas by keeping the above mentioned factors in mind. Students may start their own design studio or can get practical image of their designs by selling them to different printing mills and units.

#### **COURSE OUTCOMES-**

- It help student to create design that are unique, effective and memorable.
- It's an internal ability to come up with new and inventive ways to fulfill a need.
- It is a process of skill development, exposed to new design avenues.
- It helps students to learn customize designing and build their own business.

# **PRACTICALS**

- 1. Practices:
  - 1.1. Make 2-2 repeat units on following bases and placements
  - 1.1.1 Unit Repeating Design
  - 1.1.2 The drop device:
  - 1.1.2.1 Half (1/2) drop
  - 1.1.2.2 One third (1/3) drop
  - 1.1.2.3 One quarter (1/4) drop
  - 1.1.2.4 Full drop
  - 1.1.3 The diamond.
  - 1.1.4 The ozee (open ozee, interlacing ozee closed open ozee)
  - 1.1.5 The rectangle
  - 1.1.6 The sateen basis method
- 2 Instructions:
- 2.1 Every theme of the design must have at least three colour schemes for the final selected design in one repeat unit.
- 2.2 Every theme of the design should be in practical No. l traditional style and it should be in modern styles.
- 3. Practice Exercise:
  - 3.1 Theme: International design

For: Dress material Fabric: Blended fabric

Colour scheme: maximum 5 colour

Method: screen printing

18

3.2 Theme: Abstract or modern pattern 16

For: saree

Fabric: synthetic fabric

Color scheme: Maximum seven colour

Method: screen printing

3.3 Theme: decorative human figures 16

For: Saree

Fabric: Silk

Color scheme: Minimum three colour

Method: block printing

3.4 Theme: Building and temples or monuments 15

For: Office curtain

Fabric: Plain cotton sheet

Color scheme: Minimum Five colour

Method: Screen printing

Note: Size of themes 3.9 & 3.10 should not be less than 18"x45".

# **REFERENCE BOOKS:**

10. World textiles John hekks

11. Modern Japanese Prints Frances Blackarmore

12. Russian Textile Design Arove Art Publishes Lemirngrad

13. Ancient Egyptian Design Wilson

14. Easy Way to do Chinese painting Chin Chow Chain

15. Silver Study of Design
Mark Truner
16. How to draw human figures
Fester series

of the formal main figures and the sense of the sense of

17. Abstract and floral design E.A Seguy

18. Abstract art pattern and design M.P.

#### FREE HAND DRAWING & PAINTING II LAB

Course Code	TD 6009
Course Title	FREE HAND DRAWING & PAINTING II LAB
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	None

# **COURSE LEARNING OBJECTIVES**

Free Hand Painting 1s a subject 1or which students require full confidence in their hands. After learning almost all type of motifs and figure, students are how capable to go hand painting as they have learnt all the forms naturally as well as creatively. After studying the basic forms and shapes, natural and geometrical in IInd year. We move to the human figures and animated forms in IIIrd year. The study of human figures is essential as a part of designing likewise animated figures is becoming more important now days.

# **COURSE OUTCOMES-**

Throughout freehand drawing course, some learning outcomes should be acquired by the students that meet the objectives of this course:

- The students should be able to observe the shapes and objects, and record the scale and proportion and dimension accurately.
- The students should be able to analyze and measure the relative proportions of the shapes and objects in a composition.
- They should be able to analyze the location of the lines in relation to each other in the model, and analyze the angles of the vanishing points.
- The students should be able to draw sketch quickly.
- The students should be able to present their drawing by hatching techniques, besides, show shadow, shade and texture of objects.
- Choose the suitable color plan for the project.
- Clear the basics of mixing the colors.
- Illustrating shades and shadows in the drawing.

# **COURSE CONTENTS**

1. Pot painting in modern pattern.	13
2. Bed cover in floral pattern.	13
3. Ladies suit/kurti in geometrical & floral pattern.	13

# **REFERENCE BOOKS**

1 Hand Woven Fabrics of India	Dhamija/ Jain
2 Indian Crafts	D.N. Saraf
3 Traditional Indian Textiles	Gillow John.
4 Masterpieces of Indian Textiles	Rustam J. Metha
5 Brocades of Ahmedabad	Jhala, Uma De.

6 South Indian Traditions of Kalamkari

7 Costumes and Textiles of India

8 Miniature Painted Techniques

9 Kashmiri and its Shawls

10 Indian Textiles

Lolikavaradrajew

BrijBhushan

Sumo Hendra

Ananymous

Irwin John.

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#### FASHION DESIGN AND ILLUSTRATION II LAB

Course Code	TD-6010
Course Title	FASHION DESIGN AND ILLUSTRATION II LAB
No. Of Credits	1 (L-0, T-0, P-2)
Prerequisites	None

#### COURSE LEARNING OBJECTIVES

- 1. To provide knowledge of various fashion trends and textiles.
- 2. To inculcate the interest and to develop a sense of appreciation and creative expression in selection of ready-made clothes.
- 3. To enable the students to develop interest in research for various projects and develop appropriate skills in designing dresses.
- 4. To enable students to acquire basic knowledge about textiles necessary to select better fabrics for Apparel and designing clothes.

#### **COURSE OUTCOMES-**

- 1. Students have a command of drawing the human figure and environment, from imagination and observation.
- 2. Students are able to execute drawings and finished illustrations that demonstrate expertise in dynamic composition, spatial relationship, and design.
- 3. Develop and/or augment a personal voice in the students' art through the exploration of a variety of visual vocabularies to express a unique perspective.
- 4. Student demonstrates a unique voice, vision and style to execute finished illustrations.

# CONTENTS-

- 1. Sketches of Boys / Girls/ Ladies / Gents Garments in Pencil, Wax, Crayon, Ink Water and Poster Colours.
  - 1.1 Casual Wear
  - 1.2 Formal Wear 6
- 2. Design and Paint Dresses on Fashion Figures According to Fabric Swatches.
- 3. Illustration of different types of Fabrics:-
  - 3.1 Plain, Printed, Checks, Dots, Striped and Textured in Suitable Medium.
- 4. Computer Aided Dress Designing and Application of Fashion of Different Poses Using Illustrator, Photoshop or other Related Software.

#### REFERENCES

1. How to Draw & Paint Fashion Walton T. Foster

- 2. Women's Hi Fashion Pioneer Books Company
- 3. Hi Fashion Hema Malini
- 4. Fashion Design Illustration Women Patric John Ireland
- 5. Advance Fashion Sketch Book Vol. I Bina Abling
- 6. Advance Fashion Sketch Book Vol. II Bina Abling

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