## Scheme & Syllabus of UNDER GRADUATE DEGREE COURSE

# I<sup>st</sup> Semester (Textile Design)



Rajasthan Technical University, Kota Effective from session: 2023-24



### Ist Year- Ist-Semester: Textile Design

### **Teaching and Examination Scheme: B. Des.**

#### THEORY Course Contact hrs./week Marks Credits S Category Ν Code Title Total Т Р Ι Total L Е Hrs. Т A Е 1 1BOD-01 2 2 30 70 100 Design **Communication Skills-I** 2 1BOD-02 2 Design concept & composition-I 3 4 30 70 100 4 Design 1 -3 1BOD-03 **Drawing and Colouring-I** 2 2 30 70 100 2 Design --4 1BOD-04 **Textile Science-I** 3 4 30 70 100 4 Design 1 -1BOD-05 30 100 5 **Cultural Studies** 2 2 70 2 Design --12 2 14 150 350 500 14 Sub Total -PRACTICAL & SESSIONAL 1BOD-06 **Textile Science Lab-I** 3 3 60 40 100 1.5 6 Design **Design concept & composition** 2 2 60 40 100 1 --7 Design 1BOD-07 Lab-I 8 Design 1BOD-08 Language Lab-I -2 2 60 40 100 1 -1BOD-09 **Computer Application Lab-I** 3 3 60 40 100 1.5 9 --Design 1BOD-10 **Drawing and Colouring Lab-I** 2 100 10 2 60 40 1 --Design 1BOD-10 Foundation (Sports-I / NSS / 11 100 0.5 -----Design NCC) **Sub Total** 12 300 200 600 12 6.5 --**TOTAL OF Ist SEMESTER** 2 450 12 12 26 550 1100 20.5

#### Ist Year - Ist-Semester

L: Lecture, T: Tutorial, P: Practical. ETE: End Term Exam, IA: Internal Assessment



### 1BOD-01: Communication Skills-I

Credit: 2 2L+0T+0P

#### Maximum Marks: 100 (IA: 30, ETE: 70) End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	Communication: Meaning, Importance and Cycle of Communication. Media and Types of Communication. Verbal and Non-Verbal Communication. Barriers to communication. Formal and Informal Channels of Communication (Corporate Communication). Divisions of Human Communication and Methods to improve Interpersonal Communication. Qualities of good communication.	5
2.	Grammar: Passive Voice. Reported Speech. Conditional Sentences. Modal Verbs. Linking Words (Conjunctions)	5
3.	Composition: Job Application and Curriculum-Vitae Writing. Business Letter Writing. Paragraph Writing. Report Writing.	5
4.	Short Stories: "Luncheon" by Somerset Maugham. "How Much Land Does a Man Need?" by Count Leo Tolstoy. "The Night Train at Deoli" by Ruskin Bond.	5
5.	Poems: "No Men are Foreign" by James Kirkup. "If" by Rudyard Kipling. "Where the Mind is without Fear" by Rabindranath Tagore.	6

- Intermediate English Grammar Raymond Murphy, Cambridge University Press.
- English Grammar, Usage & Composition Tickoo & Subramanian, Pub: S. Chand and Co.
- A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet Pub: ELB.
- High School English Grammar and Composition Wren & Martin, Pub: S. Chand and Co.
- ABC of Common Grammatical Errors Nigel D Turton, Macmillan India Ltd
- Soft Skills Dr. K. Alex, Pub: S. Chand and Co.



### 1BOD-02: Design Concept and Composition- I

Credit: 4 3L+1T+0P

#### Maximum Marks: 100 (IA: 30, ETE: 70) End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	Definition of Line, Lines and Visual Illusion, Line and Impression. Different type of forms, Drawings Development and Possibilities of Line Drawings. Knowing the Tools and Materials, Drawing& its Evolution and Possibilities, Line -Visual Kinetics (Flow and Weight) Energy and Lines, Other Values of Line.	9
2.	Study and development of textures of marble, blow, smoke, embossed, salt, fabric, surface enhancement texturing, thread puling etc. Study of Negative and positive space and its application in design concepts.	6
3.	History of Colour theories. Understanding of Elements, Principles of Design and their articulation. Processes of design thinking Formal visual properties of line, shape, form, Pattern, value, texture and sequence.	10
4.	To develop a sense of composition. To develop understanding of tangible and intangible aspects of elements of design. Development of prints, line illusion, impact of prints through lines, shapes and forms on various surfaces.	8
5.	Study of Principle of Design, Concepts and its application in given themes. Studio exercises using various media exploration concepts of balance, harmony, repetition, rhythm, emphasis, proportion scale in 2, 3 & 4. Understanding & Articulation of Aesthetic Principles (Visual Order, Movement, Placement, Size, Alignment and Orientation). Study of application of Design concepts by National and International Designers, artists and craftsmen.	6

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- Bloomsbury Academic, Fashion Theory Volume 18 issue 4- The Journal of Dress Body & Culture, UK September 2014. Bloomsbury Academic.
- Anderson Felsner & Ronald Reed, Color Studies, UK January 2014/US November 2014, Fairchild Books.
- Michael Hann, Structure & Form in Design, UK September 2012/US November 2012, Berg Publishers.
- Karl Aspelund, Designing- An Introduction, UK November 2014/US September 2014, Fairchild Books. Terry Jones, 100 contemporary Fashion Designers, Taschen 25 special edition, November 2000, Tuschen publishers.
- G.J Sumathi, Elements of Fashion and Apparel Design, New India 2007, New Age International publisher Kathryn Mckelvey, Fashion Design: process, Innovation and Practices, .UK 2012, Wiley.



#### 1BOD-03: Drawing and Colouring-I

Credit: 2 2L+0T+0P

#### Maximum Marks: 100 (IA: 30, ETE: 70) End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	Freehand Sketching and its importance. Sketching with various medium like Pencil, Pen, ink, water color, Poster color, Oil Pastel color, Dry Pastel, Charcoal Pencil, Color Pencils etc.	4
2.	Perspective drawing, Silhouette drawing, Line Contour, Study of 2 dimensional & 3 dimensional sketching/drawing.	4
3.	Study of colour, colour theories and its application (Primary, Secondary, Tertiary, Intensity, Value, Hue, Tints, Shades, Tones and Color Wheel). Comparison between Pigment and colour theory.	8
4.	Study method and process of shading techniques through scribbling, doodling, stippling and hatching. Nature Study and its application in design.	5
5.	Different types of drawing (Caricature drawing, cartoon drawing, Figure drawing, gesture drawing, line drawing, Photorealism, Sketch drawing)	5

- Bina Abling. UK June 2003/US May 2003. Model Drawing. Fairchild Books.
- Watson's Textile Design and Colour: Elementary Weaves and Figured Fabrics (Woodhead Publishing Series in Textiles)" by Grosicki Z.
- John Hopkins. UK November 2009/US December 2009. Basics Fashion Design.
- Fashion Drawing. Ava Publishing.
- Bina Abling. UK June 2012/US April 2012. Fashion Sketchbook. Fairchild Books.
- Bina Abling. UK November 2005/US September 2005, Marker, Rendering for Fashion, Accessories & Home Fashions. Fairchild Books.



### 1BOD-04: Textile Science-I

Credit: 4 3L+1T+0P

#### Maximum Marks: 100 (IA: 30, ETE: 70) End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	<b>Fibre Polymerisation</b> - Type of polymers, Intra polymer bonding, Bonds between atoms in polymers, Inter-Polymer forces of attraction, Relation between water molecules & textile Fibre, Properties of fibre forming polymers- Hydrophilic, Chemical, linear, long, orientation, high melting points etc.	8
2.	Classification of Textile Fibres. Defination of Textile fibres- Staple fibre, filament fibre. Introduction of yarn & Fabric. General properties of Textile fibres, Microscopic appearance of Textile fibres cotton, jute, flex, hemp, wool, silk, viscose, acrylic, polyester, nylon etc.	6
3.	<b>Cotton:-</b> History & classification of cotton. Process of Cultivation & Harvesting of cotton Fibre. Ginning & Bailing of cotton. Fibre Morphology of cotton, chemical composition of cotton, polymer system of cotton, Physical & chemical properties of cotton.	6
4.	<b>Jute: -</b> History, Process of Cultivation & Harvesting, Retting of Jute Fibre. Fibre Morphology of jute, chemical composition of jute, polymer system of jute, Physical & chemical properties of Jute.	5
5.	<b>Flax: -</b> History, Process of Cultivation & Harvesting, Retting of flax Fibre. Fibre Morphology of flax, chemical composition of flax, polymer system of flax, Physical & chemical properties of flax.	4
6	<b>Wool:</b> - History & Classification of wool, Shearing of wool, sorting & grading of wool, Fibre Morphology of wool, chemical composition of wool, polymer system of wool, Physical & chemical properties of wool. Felting of wool. Difference between woolen & worsted.	6



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Silk- History & Classification of Silk, sericulture of silk, production of raw silk
 (drying, sorting, cooking & Reeling of silk), Fibre Morphology of silk, chemical composition of silk, polymer system of silk, Physical & chemical properties of silk.

- Textile Science: An explanation of fibre properties by E.P.G GOHL & L.D. VILENSKY.
- Textile Science by Rastogi Deepali & Chopra Sheetal.
- Textiles: Fibre to fabric by Bernard P. Corbman.
- Textile Fibres by V.A. Shenai.
- Textile Fibres by S.P.Mishra.
- Handbook of Textile Fibres by James Gordon Cook.
- Introduction to Textile Fibres by H. V. Sreenivasa Murthy.



### **1BOD-05: Cultural Studies**

Credit: 2 2L+0T+0P Maximum Marks: 100 (IA: 30, ETE: 70) End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	<b>EVOLUTION OF CIVILIZATIONS AND CULTURE:</b> In terms of Food, Clothing, Shelter, Religions, Rituals, Customs. Difference between religion, ritual and custom, Interrelationship within societies, Symbolism – religious and cultural, Culture- material and symbolic. Elements of culture- Language, shelter, clothing, economy, religion, education, values, climate, Government/ laws, Recreation/ entertainment.	8
2.	<b>INTER-RELATIONSHIP OF CLOTHING AND CULTURE</b> : Patterns of culture. Relation to the material culture. Folkways, customs and laws. Clothes, attitudes and values. Cultural change and fashion change.	6
3.	<b>CLOTHING AND HUMAN BEHAVIOUR:</b> Clothes and self-concept. Conformity and individuality in dress. Clothing symbolism. Clothes, roles and status. Differentiation in the mass society.	4
4.	<b>CULTURE OF VARIOUS COMMUNITIES OF RAJASTHAN:</b> Evolution. Famous communities –. Cultures. Religions and rituals. Costumes Isolation and related problems.	4
5.	<b>UNIVERSALIZATION OF MODERN CIVILIZATIONS:</b> With reference to Travel, Media, Food, Entertainment, Clothing, Lifestyle etc.	4

- Sharma, Ram Sharan, Material Culture & Social Formations in Ancient India, Macmillan India Ltd.
- Bose, M. L., Social and Cultural History of Ancient India, Concept Publishing Co.
- Fisher, Nora, Mud, Mirror and Thread:Folk Traditions of Rural India, Grantha Corporation.
- Ganguly- Scrase, Ruchira and Scrase, Timothy J., Globalization and the Middle Classes in India:
- The Social and Cultural Impact of Neoliberal Reforms.
- Srinivas, Mysore Narasimhachar and Srinivas, M. N., Social Change In Modern India(Rev Edn.), Orient Longman Pvt. Ltd., 2005.



### 1BOD-06: Textile Science Lab-I

Credit: 1.5 0L+0T+3P Maximum Marks: 100 (IA: 60, ETE: 40)

Sr. no.	Торіс
1.	Longitudinal & Cross section view of different fibers like cotton, jute, flex, hemp, wool, silk, viscose, acrylic, polyester, nylon etc.
2.	Market Survey: Collect the samples of different fibers like cotton, jute, flex, hemp, wool, silk, viscose, acrylic, polyester, nylon etc. & explain about their in details with end uses.
3.	Geographical study of different natural fibre production in India.

- Textile Science: An explanation of fibre properties by E.P.G GOHL & L.D. VILENSKY.
- Textile Science by Rastogi Deepali & Chopra Sheetal.
- Textiles: Fibre to fabric by Bernard P. Corbman.
- Textile Fibres by V.A. Shenai.
- Textile Fibres by S.P.Mishra.
- Handbook of Textile Fibres by James Gordon Cook.
- Introduction to Textile Fibres by H. V. Sreenivasa Murthy.



### **1BOD-07: Design Concept and Composition Lab-I**

Credit: 1 0L+0T+2P Maximum Marks: 100 (IA: 60, ETE: 40)

Sr. no.	Торіс
1.	To study the processes of different mediums while applying elements and principles of design.
2.	Visualization of Tangible and Non Tangible aspects of 2D & 3D Design (Physical Characteristic, Emotive Quality, Symbolism and Visual Hierarchy, Contextual form, Abstract form, Pictorial and Typographical Elements). Understanding of Scaling and enlargement of design.
3.	Development of motifs or pattern to apply on various surfaces. Focusing on surface ornamentation. Study of color selection implied for different themes.
4.	Inspiration capturing, collection of inspiration and study of design extractions out of each inspiration. Product development process: inspiration, ideation, exploration & Prototyping.

- Anderson Felsner & Ronald Reed, Color Studies, UK January 2014/US November 2014,
- Fairchild Books & Michael Hann, Structure & Form in Design, UK September 2012/US November 2012,
- Berg Publishers & Karl A Spelund, Designing- An Introduction, UK November 2014/US September 2014,
- Fairchild Books. & Terry Jones, 100 contemporary Fashion Designers, Taschen 25 special edition, November 2009.
- Taschen publishers & Kathryn Mckelvey, Fashion Design: process, Innovation and Practices, UK 2012, Wiley.



#### 1BOD-08: LANGUAGE LAB-I

Credit: 2 0L+0T+2P Maximum Marks: 100 (IA: 60, ETE: 40)

Sr. no.	Торіс
1.	Phonetic Symbols and Transcriptions.
2.	2. Extempore.
3.	Group Discussion.
4.	Dialogue Writing.
5.	Listening comprehension.



#### 1BOD-09: Computer Application Lab –I

Credit: 1.5 0L+0T+3P Maximum Marks: 100 (IA: 60, ETE: 40)

Sr. no.	Торіс
1.	Overview of Parts of Computer, Practice of using My Computer, creating, deleting folders and shortcuts. Practice on Control Panel/ Installing/Uninstalling/ Adding Devices.
2.	<ul> <li>Exercise on Word Processing:</li> <li>Creating, saving and Opening documents.</li> <li>Editing Documents-Cut, Copy, Paste, Undo, Redo, Copying one document to other, Change Case.</li> <li>Character and Paragraph Formatting, Numbering and Bullets</li> <li>Page Formatting, Header and Footer, Page Break, Watermark</li> <li>Spell Check, Find and Replace, Inserting Pictures and Clip-arts</li> <li>Working with Tables.</li> <li>Mail-Merge.</li> </ul>
3.	<ul> <li>Exercises on Spreadsheets:</li> <li>Creating, saving and Opening worksheet.</li> <li>Editing Worksheet.</li> <li>Formatting Cells- Font, Number Formats Alignment and Borders.</li> <li>Charts and Graphs.</li> <li>Sorting and Filtering.</li> </ul>
4.	<ul> <li>Exercises on Presentation Package:</li> <li>Creating, saving and Opening presentations.</li> <li>Adding animation in slides</li> <li>Running a Slide Show</li> <li>Printing Slides and Handouts</li> <li>Hands on Experience on usage of Mobile Phones</li> </ul>

- Computer Fundamentals P.K. Sinha and P. Sinha, BPB publication.
- Microsoft office for 2016 Amy Kinser, Pearson education.



#### 1BOD-10: Drawing and Colouring Lab-I

Credit: 1 0L+0T+2P Maximum Marks: 100 (IA: 60, ETE: 40)

Sr. no.	Торіс
1.	Prepare freehand designs with different mediums like Pencil, Pen, ink, water color, Poster color, Oil Pastel color, Dry Pastel, Charcoal Pencil, Color Pencils etc.
2.	Human figure drawing, object drawing & nature drawing. 2 dimensional & 3 dimensional drawing.
3.	Develop designs by using CMYK & RGB colour system, chromatic circle & different colour schemes.
4.	Develop designs by using different shading techniques (scribbling, doodling, stippling and hatching)

- Bina Abling. UK June 2003/US May 2003. Model Drawing. Fairchild Books.
- Watson's Textile Design and Colour: Elementary Weaves and Figured Fabrics (Woodhead Publishing Series in Textiles)" by Grosicki Z.
- John Hopkins. UK November 2009/US December 2009. Basics Fashion Design.
- Fashion Drawing. Ava Publishing.
- Bina Abling. UK June 2012/US April 2012. Fashion Sketchbook. Fairchild Books.
- Bina Abling. UK November 2005/US September 2005, Marker, Rendering for Fashion, Accessories & Home Fashions. Fairchild Books.



### Ist Year- Ist-Semester: Textile Design

#### **1BOD-11:** Foundation: Sports-I

Credit: 0.5

S. No.	Topic (Any Two out of 4)
	INTRODUCTION TO PHYSICAL EDUCATION IN THE CONTEMPORARY
1	CONTEXT
1	Learn and demonstrate the technique of Surya namaskar.
	Select any one sports available in the college and learn different techniques involved in its play.
	CORE PHYSICAL EDUCATION-: FITNESS, WELLNESS AND NUTRITION
	(i) Measurement of Fitness Components – Leg-raise for Minimal Strength (Muscular Strength);
2	Sit-ups Muscular Endurance); Harvard Step Test, Run and Walk Test (Cardiovascular
	Endurance); Sit and Reach Test (Flexibility) Measuring height, weight, waist circumference
	and hip circumference Calculation of BMI (Body Mass Index) and Waist-Hip Ratio.
	(ii) Engage in at least one wellness programme and write a report on it.
	CORE PHYSICAL EDUCATION-: POSTURE, ATHLETIC CARE AND FIRST AID (Any
	Two)
3	(i) Demonstrate Stretching and Strengthening Exercises for Kyphosis, Scoliosis, Lordosis,
5	Knock Knees, Bow Legs, Flat Foot, Back Pain and Neck Pain.
	(ii) Illustration and Demonstration of Active and Passive Exercises.
	(iii) Asanas with Therapeutic Value (Any five Asanas): Karnapeedasana, Padmasana,
	Dhanurasana, Sarvangasana, Paschimottanasana, Chakrasana, Halasana, Matsyasana,
	Ardhmatsyendrasana, Usthrasana, Mayurasana, Shirshasana, Vajrasana.
	(iv) Practice P.R.I.C.E. in First Aid.
	SPORTS ADMINISTRATION & MANAGEMENT (Any Two)
4	(i) Demonstration of Supervision activities in Sports Management. Demonstration of skills of
	Management.
	(ii) Demonstration of fixtures of various kinds in sports competitions.
	(iii) Demonstration of technical and non-technical purchase procedure.
Referei	nce Books:

- Teaching Children Physical Education: Becoming a Master Teacher. Graham, G., Human Kinetics, Champaign, Illinois, USA.
- Concepts of Physical Fitness: Active Lifestyle for Wellness, Corbin, C. B., G. J. Welk, W. R Corbin, K. A. Welk, McGraw Hill, New York, USA.
- Teaching Today Health, Anspaugh, D.J., G. Ezell and K.N. Goodman, Mosby Publishers.
- Drug Education Handbook on Drug Abuse in Sports, Beotra, Alka, Applied Nutrition Sciences, Mumbai
- Sports Facility Management, Ammon, R., Southall, R.M. and Blair, D.A., West Virginia, USA: Fitness ٠ Information Technology Publishers.



#### **1BOD-11:** Foundation: Essentials of National Service Scheme (NSS)

#### Credit: 0.5

Sr. no.	Торіс
1	<b>INTRODUCTION TO NSS</b> Orientation and structure of NSS, Objectives of NSS, History of Social Reforms in Modern India: Brahmo Samaj, Arya Samaj, Satya shodhak Samaj: Principles and Functions.
2	<b>REGULAR ACTIVITIES</b> Distribution of working hours- association between issues and programs- community project- urban rural activities, association- modes of activity evaluation.
3	<b>WORKING FOR SOCIETY</b> Participation in various activities like tree plantation, No tobacco awareness program, Health camps and health & hygiene awareness program, blood donation camps, literacy awareness program etc.
4	<b>N.S.S REGULAR ACTIVITIES</b> College campus activities, N.S.S. activities in Urban and Rural areas, Role of Non-Government Organization's (NGO) in social Reforms, Red Cross, Rotary, Celebration of important days.

- National Service Scheme Manual, Govt. of India.
- Induction Training Module for NSS Program Officers, Rajiv Gandhi National institute of youth Development.
- Orientation Courses for N.S.S. programme officers, TISS.
- ``Social Problems in India," Ram Ahuja, Rawat Publication.
- History of Social Reforms in Maharashtra, Ed. J. Y. Bhosale, S. U. Kolhapur.



#### **1BOD-11:** Foundation: Essentials of National Cadet Corps (NCC)

Credit: 0.5	
Sr. no.	Торіс
1.	<b>INTRODUCTION TO NCC:</b> Aims, objective of NCC, incentives, duties of NCC cadet/volunteers, NCC camps: types and conduct.
2	<b>NATIONAL INTEGRATION &amp; AWARENESS:</b> Religions, Culture, Traditions and Customs of India, National Integration: Importance and Necessity, Factor affecting National Integration, Unity in Diversity, Threats National Security, Freedom Struggle.
3	<b>ENVIRONMENT AWARENESS &amp; CONSERVATION: NATURAL RESOURCES:</b> Conservation and Management. Water Conservation and Rainwater Harvesting.
4.	<b>DISASTER MANAGEMENT:</b> Disaster Management Capsule, Organization, Types of Disasters Essential Services, Assistance, Civil Defense Organization, Initiative Training, Organizing Skills, Dos and Don'ts, Natural Disasters, Man Made Disasters, Fire Services and Fire Fighting.
5	<b>COMMUNICATION AND PERSONALITY DEVELOPMENT</b> : Personality Development Capsule, Factors, Self- Awareness, Empathy, Critical and Creative Thinking, Decision Making and Problem Solving, Communication Skills, Group Discussions, Coping with Stress and Emotions, Change your Mindset, Time Management, Social Skills, Team Work, Career Counselling, SSB Procedure and Interview Skills, Public Speaking
6	<b>PERSONALITY DEVELOPMENT &amp; LEADERSHIP:</b> Introduction to Personality Development, Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological, Self- Awareness Know yourself/ Insight, Change Your Mind Set, Communication Skills: Group Discussion, Public Speaking, Leadership Traits, Type of Leadership.
7	<b>HEALTH AND HYGINE:</b> Hygiene and Sanitation (Personal and Camp), First Aid in Common MedicalEmergencies and Treatment of Wounds. Introduction to Yoga.

- NCC Cadets Handbook Common, Directorate General of NCC, New Delhi.
- NCC Cadets Handbook Special, Directorate General of NCC, New Delhi.
- Chandra B. Khanduri, "Field Marshal KM Cariappa: a biographical sketch", Dev Publications, 2000.
- Gautam Sharma, "Valour and Sacrifice: Famous Regiments of the Indian Army", Allied Publishers, 1990.