### **ASSAM WOMEN'S UNIVERSITY**

### Syllabus for Diploma in Garment Manufacturing Technology



# Department of Fashion Technology School of Media, Technology & Information Sciences Assam Women's University Rowriah, Jorhat-04

**Assam Women's University** 

### **Department of Fashion Technology**

The Department of Fashion Technology was established in the year 2014 under the School of Lifestyle and Design. The Department is providing Diploma course of 4 semesters (2 years) duration, **Diploma in Garment Manufacturing Technology** aiming as providing advance skills in different subjects of Fashion Technology to the students. During the study program, students are taken through elementary technical, design and management skills to the advanced levels to meet the current garment industry requirement.

#### Brief overview of the course

Diploma in Garment Manufacturing Technology course adds a strong touch aided by modern technologies. This course deals with the fundamentals of almost every aspect of Fashion Designing and helps in building a foundation and gains the basic knowledge of Fashion Industry and Fashion Designing as a whole. In the duration of these two semesters, the students will learn diverse set of topics related to Fabrics, Surface Ornamentation, Fashion illustration, Pattern Making, Construction of Garments, Computer Aided technologies in the Fashion industry and most importantly about entrepreneurial development among women.

### Eligibility for admission:

Candidate seeking admissions to the Diploma in Garment Manufacturing Technology shall have passed higher secondary examination (10+2) or equivalent from any recognized board or council in any discipline.

### **Objectives of the Programme:**

- To empower students to have satisfying and fruitful career in fashion industry.
- To equip students with knowledge of design & creativity which would in turn help them pursue higher education.
- To empower students with ample knowledge to set up new start-ups or Selfhelp groups.
  - To encourage entrepreneurial skills and technical knowledge for national and international fashion centres and apparel industry.
- To provide an understanding of Fashion and Apparel Design in various fields of fashion, textiles, apparel, furnishings, home textiles, and retail business.
  - To provide hands-on experience on the upgraded technologies.
- To provide experience in responding to market opportunities with creative and innovative products that integrate a set of academic disciplines such as fashion, textile materials, design fundamentals, business fundamentals, sourcing, data mining of market information, and new developments in fashion and apparel industry.

### **Outcomes of the Programme:**

By the end of the Programme the students will

- Gain knowledge of the fundamental principles of fashion, apparel, and design.
- Inculcate knowledge on the fashion process from conceptualization to technical expertise.
- Apply knowledge and skills in the use of basic tools, techniques and processes sufficient to produce work from specification to finished products.
  - Use CAD applications in par with the industry demands.
- Foster a spirit of zeal in learning and communicating fashion towards professional development.
- Become familiar with upcoming trends and practices in fashion and apparel sectors.
- Recognize the professional and personal responsibility of Designers to the community.
- Understand techniques that impacts fashion and apparel industry to meet specific consumer demands.
  - Exhibit skills leading to employability in fashion and allied industries.
- Interpret design concepts and ideas represented through illustrations, photographs, graphics and visual display of merchandise.
- Create global design products utilizing knowledge of new technology and sustainability in Fashion.
  - Comprehend sustainability in their design aesthetic and design sustainability.
- Develop entrepreneurial spirits through start-ups to function independently topromote their design vision through creative and innovative work.

\*\*\*L= Lecture, T= Tutorial, P= Practical, CH= Credit Hour, CR= Credit

1 Lecture/ Tutorial = 1 Hour

1 Practical = 2 Hours

### **Assessment and Examination**

- English and Assamese shall be the medium of instruction and examination.
- Continuous evaluation shall be carried through assignments and class works.
- Assessment of a student's performance in a course shall be based on marks for examinations conducted at the end of each semester.

### ACADEMIC PROGRAMMES AND STUDENT INTAKE

ACADEMIC PROGRAMME	STUDENT INTAKE
Diploma in Garment Manufacturing	30
Technology	

### **COURSE HIGHLIGHTS**

Course Level	Diploma
Duration of the Course	2 years
Medium of Instruction	English and Assamese
Examination Type	Semester
Eligibility	(10+2) or equivalent
Average Course Fee	INR 6,000 to 10,000

<ul><li>CAD pattern Master</li><li>CAD Designer</li></ul>
·
·
Assistant Fashion Designer
<ul> <li>Production Manager</li> </ul>
Fashion Blogger

### DETAILS OF COURSES WITH DISTRIBUTION OF CREDITS

Code	Course Name	L	T	P	СН	CR
1st Semester						
CC						
DGMT1201	Apparel and Fashion	1	1	0	2	2
DGMT1502	Basic Clothing Construction	0	2	3	8	5
DGMT1503	Fashion Illustration I	0	2	3	8	5
DGMT1504	Surface Ornamentation Techniques	1	2	2	7	5
DGMT1305	Accessory Designing	1	1	1	4	3
2 <sup>nd</sup> Semester						
CC						
DGMT2501	Pattern Making and Grading	0	2	3	8	5
DGMT2502	Fashion Illustration II	0	2	3	8	5
DGMT2503	Computer Application in Fashion Designing	1	2	2	7	5
DGMT2204	Entrepreneurial Development	1	1	0	2	2
DGMT2305	Garment Construction I	1	1	1	4	3
3 <sup>rd</sup> Semester						
CC						
DGMT3501	Advanced Printing technology	1	2	2	7	5
DGMT3502	Computer Aided Designing-I	0	2	3	8	5
DGMT3503	Fashion Forecasting	1	1	3	8	5
DGMT3504	Advance Draping Techniques	0	2	3	8	5
4 <sup>th</sup> Semester						
CC						
DGMT4501	Computer Aided Designing-II	0	2	3	8	5
DGMT4502	Pattern making and garment construction	1	2	2	6	5
DGMT4503	Computer Aided Printed Textile Designing	1	2	2	7	5
DGMT4504	Entrepreneurship	2	1	2	7	5

**Total Credit-80** 

### ASSAM WOMEN'S UNIVERSITY SEMESTER I

Paper Title	APPAREL AND FASHION	L	T	P	CH	CR
Paper Code	DGMT1201	1	1	0	2	2

Minimum number of classes per week: 2 Minimum number of classes in a semester: 26

### **COURSE OBJECTIVES:**

- To acquaint students with knowledge in apparel and fashion designing for special categories.
- To provide an insight into technological aspects of apparel manufacturing and fashion.

### Module-1

(No. of classes required- 10)

#### Introduction--

Apparel Industry- Organizational structure and sectors of the garment Industry, apparel product types, developments in recent years, opportunities and challenges.

### **Design Concepts--**

Elements and principles of design, application of design concepts in fabrics and fashion products.

### Fashion -

Introduction, terminologies - fashion, style, taste, trend, fad, classics, cycle, boutique, haute couture, designer, Prêt a Porter, silhouette -types of silhouette - natural body, slim line, wedge, hour glass, extreme volume silhouette, knock off, avant-garde, bespoke, collage.

Introduction to fashion art, proportion and the fashion figure.

### **MODULE-2**

(No. of classes required- 16)

### Fashion seasons -

Introduction and terminologies -International market and Indian market, Season - winter, summer, spring autumn.

### Indian fashion designers-

Introduction of the designer, education, specialty, brand / label, contribution to fashion, product range, outlets, Collection showcase. Fashion brands, fashion capitals, fashion icons and role of fashion in movies, sports and politics.

### Fashion clothing categories -

Introduction, types, based on age and activity, styling, price and size ranges for men's,

women's and kid's wear.

### **COURSE OUTCOME:**

**C. O.** The students will be able to get Idea of Apparel, principles and techniques of fashion and fashion design, Learn all the fashion terminologies.

- ElisabettaDrudi, TizianaPaci, "Figure Drawing for Fashion Design", Pepin Press Publication, 2002.
- Gavin Ambrose, Paul Harris, "The Visual Dictionary of Fashion Design", Bloomsbury Publishing India Private Limited, 2007.
- James Stockton, "Designers Guide to Colour", Chronicle Books, San Francisco, 1984.Maier, Manfred, "Basic Principles of Design", Van Nostrand Reinhold, 1980.
- Sharon L Tate, Mona S Edwards, "Inside Fashion Design", Pearson Education India, 2006.
- Stanyer Peter, "The Complete Book of Drawing Techniques", Arcturus Publishing Ltd., 2003.
- BinaAbling, "Fashion Sketchbook", Bloomsbury Academic USA, 6th edition, 2015Jaeil Lee, Comitte Steen, "Technical Source Book for Designers", Bloomsbury Academic USA, 2nd edition, 2015.
- John Wiley, "Theory of Fashion Design" John Wiley and Sons. Inc, New York, 1990. Patrick John Ireland, "Fashion Design Illustration Children", Batsford, London, 1996.
- Peacock J, "Fashion Source Books", Thames and Hudson, London, 1998.
- Tisiann. Richard Jones, "The Apparel Industry", Wiley-Blackwell, 2nd Edition, 2006.
- Thomas Anna Gawb, "The Art of Sewing", UBS Publishers Distributers ltd. 1994.a Paci, "Figure Drawing for Fashion Design", Pepin Press Publication, 2000

### ASSAM WOMEN'S UNIVERSITY SEMESTER I

Paper Title	Basic Clothing Construction	L	T	P	СН	CR
Paper Code	DGMT1402	0	2	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **COURSE OBJECTIVES:**

- To impart knowledge of machines used for sewing.
- To impart knowledge about various construction techniques, applying these techniques in garment construction.

### Course Outline -

### Module 1

(No. of classes required-16)

### **Practical Exercise**

- Instructions for practical exercises-
- Tools and equipment used in measuring, marking, cutting, sewing and finishing of garments
- Parts of basic sewing machine and its operation
- Sewing machine- its defects and remedies.
- Machine control exercises on speed control, paper exercises, fabric exercises

### Module 2

(No. of classes required-15)

### **Practical Exercise**

- Preparation of Samples of Basic hand stitches- basting, tacking, hemming, button hole etc.
- Preparation of various Samples of seam and edge finishes.

### Module 3

(No. of classes required-17)

### **Practical Exercise**

- Preparation of samples of pleats variations.
- Preparation of darts and tucks samples
- Preparation of samples for gathers and shirring
- Preparation of samples of different necklines using bias binding, bias facing and shaped facing.

### Module 4

(No. of classes required-17)

### **PracticalExercise**

- Preparation of Samples of Placket Openings
- Preparation of Samples of Pockets
- Preparation of Samples of Attaching various types of fasteners—hooks, snaps, loops, button, velcro
- Preparation of Samples of Basic grain lines-straight, off and bias

### **COURSE OUTCOME:**

**C.O.1**: Students will be able to do maintenance and operate machines properly.

**C.O.2:** After going through this subject, the student will be able to design and construct garments appropriately to customer's satisfaction and need.

- 1. Clothing Construction by Doongaji, Raj Parkashan, New Delhi
- 2. System of Cutting by Zarapkar, Navneet Publications (India) Ltd.
- 3. Basic Processes and Clothing Construction by SherieDoongaji and RaushiniDespande. McGraw Hill Book Co. Inc. New York
- 4. Simplicity Revised ABC of Short-Cut Sewing, UBS Publishers & Distributors Pvt. Ltd. New Delhi.
- 5. Stitch by Stitch by Tarstar Books, UBS Publishers Distributors Ltd. New Delhi
- 6. Complete Guide to sewing by Reader's Digest, Pitman Publishing Corporation, New York.

### ASSAM WOMEN'S UNIVERSITY SEMESTER I

Paper Title	Fashion Illustration I	L	T	P	СН	CR
Paper Code	DGMT1403	0	2	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **COURSE OBJECTIVES:**

- To help students to understand design fundamental, elements and principles of design.
- To enable students to gain knowledge of figure sketching and drawing.

Course Outline – Module 1: Elementsof Art Practical exercise

(No. of classes required-17)

- Illustrate different type of lines
  - Corresponding colour exercises on colour to be carried out such as colour wheel, tints, shades, colour schemes.

### Module 2: Pattern Details Practical exercise

(No. of classes required-17)

actical excitise

- Collection of samples for different textures.
- Sketching different textures of swatches

### Module 3: Illustrating fashion figures Practical exercise

(No. of classes required-16)

• Sketching of different shapes.

• Sketching of different Silhouettes.

### Module 4: Rendering Practical exercise

(No. of classes required-15)

- Illustrating pattern details of the following necklines, collars, sleeves, waistlines, cuffs, skirts, trousers, yokes, waistlines, pockets, etc.
- Corresponding exercises with rhythm, harmony, proportion, balance and emphasis

### **COURSE OUTCOMES:**

**C.O.1.** The students will be able to understand the fashion design concepts, illustration techniques and colour theories.

- 1. Drawing from Anatomy by Victor Perard, Grace Parkashan, Bombay,
- 2.

### ASSAM WOMEN'S UNIVERSITY SEMESTER I

Paper Title	Surface Ornamentation techniques	L	T	P	СН	CR
Paper Code	DGMT1504	0	2	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **COURSE OBJECTIVES:**

- To acquaint the students with various ornamentation techniques on the fabrics and familiarize the students with special techniques of creation of fashion accessories and develop skill in them for the development of fashion accessories.
- To imitate students to the world of rich and glorious textiles and crafts of India.
- To identify the technique of textile crafts used in a region by various communities and its economics and their social implication.

### Course Outline -

### **MODULE 1**

### (No. of classes required- 13)

• Introduction and preparation of samples for contemporary embroideries stitches (stem, back, running, seeding, straight, chain, lazy daisy, blanket, buttonhole, zigzag chain, spider's web, Cretan, fly, fish bone, Romanian, satin, long and short, cross stitch, herringbone)

### **MODULE 2**

### (No. of classes required-15)

• Introduction and preparation of samples for 3D embroidery stitches- (French knots, bullion knots, cut work, appliqué work, Ribbon work, lace work, rope work, sequin work, Lace, ribbon work,other decorations and trimmings.)

### **MODULE 3**

### (No. of classes required-12)

• Preparation of samples of Indian traditional textiles (embroidery- kasida, chickankari, Kantha, phulkari, Chambarumal, kathiawar, kutch, Sindhi, gold and silver embroidery and preparation of samples.

### **COURSE OUTCOMES:**

**C.O.1** The students should know and acquire relevant skills in embroidery techniques of different types of traditional Indian embroideries and textiles.

**C.O.2** The subject aims at developing skills in various types of stitches, traditional embroidery, dyeing processes and traditional printing methods.

- Traditional Indian Textiles by Parul B Abhishek Publications
- Dress Designing by ManmeetSodhiaKalyani Publishers
- History of Fashion by ManmeetSodhiaKalyani Publishers
- Indian Embroidery Savitri Pandit.
- Irwin and Hall Indian Embroideries, Published by S.R. Bastikar, P.B. 28,

Ahmedabad.

- Traditional Embroideries of India by Shailja D. Naik published by M/S APHPublishing Book Centre, New Delhi.
- Traditional Indian Embroideries by SamrityPandit published by M/S APHPublishing Book Centre, New Delhi.
- Traditional Textiles of India by KamaldeviChatopadhya published by M/S APHPublishing Book Centre, New Delhi

### ASSAM WOMEN'S UNIVERSITY SEMESTER I

Paper Title	Accessory Designing	L	T	P	СН	CR
Paper Code	DGMT1305	1	1	1	4	3

Minimum number of classes per week: 3 Minimum number of classes in a semester: 39

### **COURSE OBJECTIVES:**

- To gain the knowledge and significance of materials and methods used in fashion accessories.
- To understand the history and various brands of Accessories and learn different rendering techniques and theme based designing.

### Course Outline – MODULE 1

(No. of classes required- 10)

- Introduction and a brief history of fashion accessories, Tools and equipment, Classification of fashion accessories.
- Study of basic types and popular brands of fashion accessories bag, footwear, jewellery, Foot wear, hats, earrings, bags etc.

### **MODULE 2**

(No. of classes required- 10)

- Material exploration.
- Colour trends of fashion accessories.
- Product development and designing- foot wear, handbags, belts, buttons and buckles, hats, scarves, hosiery, jewellery, neck ties, hand kerchiefs, eye wear and watches.

### **MODULE 3**

(No. of classes required-19)

- Creation of theme boards for all accessories;
- Developing design ideas Tribal, traditional, fusion, innovative, Fabrication information, spec drawing.
- Product development and designing buckles;
- Cost analysis of all items.

### **COURSE OUTCOMES:**

**C.O.1** Students will be able to explore the communication between apparel and accessories.

**C.O.2** They will also be able to exhibit special techniques of creation of fashion accessories in a creative way.

### **References:**

• Bhargav R. 2005. Design Ideas & Accessories. Jain Publ.

- John Peacock .(2000).Fashion Accessories: The Complete 20th Century Sourcebook .Thames and Hudson publishing, London.
- Celia Stall-Meadows, TanaStufflebean. (2003). Know Your Fashion Accessories.
- Fairchild Publication, New York Carr Harold & John Pomeroy 1996. Fashion Design & Product Development.

### ASSAM WOMEN'S UNIVERSITY SEMESTER II

Paper Title	Pattern Making and Grading	L	T	P	CH	CR
Paper Code	DGMT2501	0	2	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester:65

### **COURSE OBJECTIVES:**

- To develop basic knowledge about technological aspects of pattern making and grading.
- Understand and learn pattern making techniques.
- Construct pattern set.
- To develop confidence for industrial line work

### Course Outline -

### **Module 1 - Introduction to pattern making** (No. of classes required-10)

- Identification of tools used for pattern making and garment construction measuring tools, marking tools, cutting tools, sewing tools, pressing tools.
- Understanding and collection of papers of various gsm used in pattern making.

### **Module 2- Body measurements**

### (No. of classes required-15)

- Importance, types of body measurements, body measuring method.
- Demonstration and calculation of average measurement for mass production of taking body measurements, anthropometric study,
- Average analysis of body measurements and standardizing the measurements.

### **Module 3- Basic Pattern Set Preparation**

(No. of classes required-25)

- Basic Front Bodice
- Basic Back Bodice
- Basic Sleeve
- Basic Front Skirt
- Basic Back Skirt

### **Module 4- Experimenting with patterns**

(No. of classes required-15)

- Marker Making & plotting of various patterns-
- Basic Front Bodice
- Basic Back Bodice
- Basic Sleeve
- Basic Front Skirt
- Basic Back Skirt

### **Course outcomes:**

C.O.1 The students to create their own ideas about technological designing of garments.

**C.O.2** Student will be able to learn time management and mass production methods.

**C.O.3** Design patterns for children's wear, women's wear and men 's wear for basic and complex styles.

- Allyne Bane, "Flat Pattern Design", McGraw-Hill Inc. US, 1972.
- Gerry Cooklin, "Introduction to Clothing Manufacture", Wiley-Blackwell, 2nd edition, 2008.
- Harold Carr& Barbara Latham, "The Technology of Clothing Manufacture", Oxford Publications, USA, 1994.
- Helen J Armstrong, "Pattern Making for Fashion Design", Pearson Education India, 5<sup>th</sup> edition, 2013.
- Winfred Aldrich, "Metric Pattern Cutting", John Wiley & Sons, 3rd edition, 1994
- The comparison of the Manuel and CAD systems for pattern making grading and marker making processes.
- Assyst-Bullmers software for patter making, grading and marker maker.
- Fashion CAD-Accurate pattern making software for perfect fitting garments.

### ASSAM WOMEN'S UNIVERSITY SEMESTER II

Paper Title	Fashion Illustration II	L	T	P	СН	CR
Paper Code	DGMT2502	0	2	3	8	5

Minimum number of classes per week: 5

Minimum number of classes: 65

### **COURSE OBJECTIVES:**

The objective of the course is to increase the proficiency in drawing skills and to inculcate creative ability in the application of these acquired skills to translate as ideas for design.

### Course Outline -

### Module 1:

(No. of classes required- 15)

- Introduction to basics of Sketching & Drawing.
- Sketching of face, features and hair styles.

### Module 2:

(No. of classes required- 15)

- Sketching a basic 12-head figure of a women
- Front View, Side View & Back View of Fashion Figure

### **Module 3**:

(No. of classes required- 15)

- Rendering of fashion figure
- Designing on varied themes, e.g., environment, seasons, cosmetics, jewellery, etc.

### **Module 4:**

(No. of classes required- 10)

- Introduction of Drapery in water colour.
- Drapery along with accessories and objects.
- Drawing in active environment, outdoor activities, quick and on the spot sketching.
- Drawing and practice of sketching of outdoor surroundings comprising of flora and fauna.

### **Module 5:**

(No. of classes required-15)

- Introduction to perspective.
- Practicing perspective by drawing buildings etc along with trees etc.
- Practice perspective in colour.

- 1. Fashion Drawing The Basic Principles by Anne Allen and Julion Seaman,
- 2. Fashion Illustration by BinaAbling,
- 3. 20,000 Years Of Fashion, The History Of Costume and Personal Adornment by François Boucher, Harry N. Abrams, Inc Publishers,

- 4. Individuality in Clothing Selection and Personal Appearance by-Mary Kefgen and Phyllis Touchie-Specht, Macmillan Publishing Co., New York
- 5. The Complete Book of Fashion Illustration by-Sharon Lee Tale and Mona Shafer, Happer& Row Publishers, New York. 8. Human Figures by A.K Dhawan, Tip Top Trading Co., Ludhiana

### ASSAM WOMEN'S UNIVERSITY SEMESTER II

Paper Title	Computer Application in Fashion Designing	L	T	P	СН	CR
Paper Code	DGMT2503	1	2	2	7	5

Minimum number of classes per week: 3 Minimum number of classes in a semester: 39

### **COURSE OBJECTIVES:**

• This course introduces students with computer and its importance in the present world. Different applications of computers are used to make them skilled

### Course Outline -

### Module I

(No. of classes required-15)

#### **Practical exercise**

- Corel Draw: Tool Introduction and usage.
- Functions of tools and its usage.
- Figure Drawing :Block figure and Flesh figure

### **Module II**

(No. of classes required-10)

### Practical exercise

- Creating Prints and textures
- Mood board &Color board

### **Module III**

(No. of classes required-14)

### **Practical exercise**

• Printing and Exporting of files: Converting them into Objects. Saving and Exporting Images. File formats, opening, saving, importing, exporting, compression, printing, saving for Web, publishing as PDF, exporting images with transparency Printing Images.

### Assignment for students-

Documentation of all processes in one project report to be submitted.

### **COURSE OUTCOMES:**

**C.O.1:** To empower students with the knowledge of CAD and their applications so they can execute their ideas creatively through CAD.

- Corel Draw By Ramesh Bangia
- CAD/CAM Computer Aided Design & Manufacturing by Mikell P Groover&Mory W Zimmers. Jr, Pearson Education Pub.2000
- Fashion Design on Computers by M. KathleenColursy, Prentice hall.2004
- CAD for fashion design by Renee Weiss Chase, Prentice hall Pub.
- CAD/CAM/CIM by R.Radhakrishnan, S.Subramanyan, V.Raju, New Age

International Pub.

• Dr. G. S. Suresh, Computer Aided Design Laboratory

### ASSAM WOMEN'S UNIVERSITY **SEMESTER II**

Paper Title	Entrepreneurial Development	L	T	P	CH	CR
Paper Code	DGMT2204	1	1	0	2	2

Minimum number of classes per week: 2 Minimum number of classes in a semester: 26

### **COURSE OBJECTIVES:**

- To explore the possibilities of becoming entrepreneurs.
- To enable the students aware about the inside of the garment Industry, its departments and personnel, jobs undertaken, references, Observations, Precautions, etc.

### Course Outline -

### **Module 1: Entrepreneurship**

(No. of classes required-10)

**Theory** 

- Entrepreneurship- Meaning, Importance, Evolution of term Entrepreneurship.
- Types of entrepreneur- Innovating, Adoptive, Fabian, Drone, Individual and Institutional, Technologist, Forced.
- Rural entrepreneurship, problems of rural entrepreneurship.
- Growth of entrepreneurship-role of entrepreneurship in economic development

### **Module 2:Women Entrepreneurship Theory**

(No. of classes required-16)

- Concept and categories of Women Entrepreneurs
- Women in organized and unorganized sector, Women in traditional and modern industries, Women in urban and rural areas - Supportive Measures for Women's Economic Activities and Entrepreneurship.
- Technological training and awards, Federations and associations.
- Problems of Women Entrepreneurs in India and Ways to Develop Women Entrepreneurs.
- Measures to Improve Women Entrepreneurship-Trade Related Entrepreneurship Assistance and Development (TREAD) scheme for women, MahilaVikasNidhi, Cooperative schemes, Government Yojanas.
- Training programs Support for training and employment programme of Women (STEP), Development of Women and Children in Rural Areas (DWCRA).

### Assignment for students-

Study about role of government in encouraging women Entrepreneurship in local region.

### **COURSE OUTCOMES:-**

C.O.1:-The students will acquire necessary knowledge and skills required for

organizing and carrying out entrepreneurial activities,

**C.O.2:**-To develop the ability of analyzing and understanding business situations in which entrepreneurs act and to master the knowledge necessary to plan entrepreneurial activities at the end of completion of this course.

- Entrepreneurship by MadhurimaLall.
- Retail Management by Gibson.GVedamani.
- J.S. Saini: Entrepreneurship and Small Business in India, Himalaya Publishing House.
- P. Charantimath: Entrepreneurship Development: Small Business Enterprises, Pearson Education.
- Vasant Desai: Small-Scale Industries and Entrepreneurship, Himalaya Publishing House.
- Kaulgud: Entrepreneurship Management, Vikas Publishing House.
- S.S Kanka, Entrepreneurial Development, Revised edition, Sultan Chand Publications, New Delhi, 2012.

### **ASSAM WOMEN'S UNIVERSITY SEMESTER II**

Paper Title	Garment Construction I	L	T	P	CH	CR
Paper Code	DGMT2305	0	1	2	8	3

Minimum number of classes per week: 3

Minimum number of classes: 39

### **COURSE OBJECTIVES:**

- 1. To understand and appreciate different kind of stitches and seams.
- 2. To develop the skills of operating the machine.
- 3. To develop the skills of making seams, tucks, pleats etc.

### Course Outline -

#### **Module 1 - Introduction to pattern plotting** (No. of classes required-13)

- Identification of tools used for pattern making and garment construction measuring tools, marking tools, cutting tools, sewing tools, pressing tools.
- Understanding and collection of materials of various gsm, used in pattern making and garment construction.

### **Module 2- Basic Pattern Set Preparation**

(No. of classes required-13)

Construction of-

- **Basic Bodice**
- Basic Sleeve
- Basic Skirt
- Trouser
- Basic torso foundation

### Module 3- Experimenting with patterns (No. of classes required-13)

- Marker Making & plotting of various patterns and adaptation of
- **Basic Front Bodice**
- Basic Back Bodice
- Basic Sleeve
- **Basic Front Skirt**
- **Basic Back Skirt**

### **Assignment for students:**

Swatch collection and presentation in creative way with details.

### **COURSE OUTCOMES:**

C.O.1 The student will be able to make pattern according to needs and demand of fashion lovers.

C.O.2 Students can design and construct garments appropriately to customer's satisfaction and need.

- Advanced Drafting & Draping by ManmeetSodhiaKalyani Publishers
- Basic Processes and clothing const. by SherieDoongajRajjPrakashan
- Text book of clothing and textiles by Sushma Gupta Kalyani Publisher
- Pattern cutting made easy by Gillian Holman Batsford
- Garment const. skills by Premlata Malik, Kalyani Publishers.

### ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Advanced Printing technology	L	T	P	C	CR
					H	
Paper Code	DGMT3501	1	2	2	7	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **COURSE OBJECTIVES -**

- To understand different techniques of hand printing and historical background.
- To understand the different methods of transferring the designs on fabric.

### **MODULE 1: Colour Media**

(No. of classes required- 16)

### **Practical**

- Basic water colour (still life, one object)
- Use of different colour media: shading pencils, water & poster colors, steadtlers, Charcoal pencils & water proof ink.
- Transferring Design on Fabrics.

### **MODULE 2: Tools and Equipments**

(No. of classes required- 16)

- Tools and material used for printing,
- Methods of fabric painting, Glass printing, Nib painting and Cone printing.
- Floral motifs- development of motifs on fabric.
- Abstract printing

### MODULE 3: Traditional Printing styles of India (No. of classes required- 17)

Brief about traditional hand painting styles of India

- Madhubani Painting.
- Warli Painting.
- Kalighat Painting.
- Phad painting.
- Miniature Painting.
- Gond Painting.
- Kerala Murals.
- Patachitra painting.
- Preparation of sample of all above painting styles

### MODULE 4: Different Printing Methods (No. of classes required- 16)

- Hand print: Tie and Dye, Block, Batiks, Screen, Stencil.
- Machine print:Roller Printing, Emboss Print.
- Preparation of sample of Tie and Dye printing(5 samples)

• Preparation of sample of Block printing( 5 samples)

### **COURSE OUTCOMES:**

- C.O.1. In this course the students will be introduced to Hand Painting and
- C.O.2. Printing Techniques, its historical Background and material required for both the techniques.
- **C.O.3.** Course will help the students to learn and implement different ways to make their collection.

- Printed Textile Design by Amanda Briggs-Goode, Laurence King publishing, illustrated edition (October 22, 2013)
- Indian Painting: The Great Mural Tradition by Seth Mira.
- Block Printed Textiles of India: by Eiluned Edwards, Niyogi Books; First edition (20 December 2015)

### ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Computer Aided Designing-I	L	T	P	СН	CR
Paper Code	DGMT3502	0	2	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **Course objectives:**

- To help students to understand the fundamentals and principles of CAD.
- To enhance the knowledge of CAD and its application.

Course Outline -

**Module I: Computer Graphics** 

(No. of classes required- 13)

### Theory:

- Introduction to Graphics and Graphics Devices: Computer Graphics, Graphics Output Devices and their general properties like (Resolution and color capability), Graphics Input Devices. Drawing Geometry. Introduction to Coordinate Frames and Color Theory Points, Vectors and Lines. Two Dimensional Cartesian reference frames, Screen Coordinates, Three dimensional Cartesian reference frames.
- Introduction to Color Theory: Introduction to Color Modes, Working with different color models and modes,

### **Practical exercise**

- Using custom colors, Picking colors, Analyzing and editing colors, Looking at gamut issues, Creating duotones, Setting color balance, Setting hue and saturation, Adjusting brightness and contrast, Working with histograms, Retouching images, Color ranges and replace color options, Cropping images, Understanding Process and spot colors, Choosing pantone colors, Applying fill and stroke colors, Mastering Computer Graphics

### **Module II: Corel Draw**

(No. of classes required- 13)

### Theory:

- Skill using Corel Draw: Introduction to CorelDraw.
- Introduction to Vector and Raster Graphics Type.

### **Practical exercise**

- Starting CorelDraw, Introduction to Corel Draw Menu, Introduction to CorelDraw Page Setup.
- Introduction to various tools of CorelDraw Working with Shapes, Lines, Texts & Objects. Creating rectangles, squares, Circles, Ellipses, Polygons, Starts and Spirals, Selecting Fill and Outlines to any shape. Moving & Rotating Shapes freely and to Fixed angles. Drawing Curve and Straight Lines, Creating Simple and Artistic Texts.

Formatting Texts by changing Font, Size and Shape of Text. Rotating texts, Assigning a Fill Color to text, Assigning outline color to text. Creating Paragraph Text, Aligning Texts, and Adjusting Line & Letter Spacing in the Paragraph text. Spell checking and finding and replacing texts. Selecting Single and Multiple Objects, Duplicating Objects, Grouping Objects, Trimming Objects, Locking and Unlocking Objects, Aligning Objects

### **Module III: Tools and Their Functions** (No. of classes required- 13) **Practical exercise**

- Working with outlines and Fills: Introduction to outlines, Defining outline width using Outline Flyout, Outline, Pen Dialog Box, Setting the Line Cap Style, Changing the Outline Color. Introduction to Fills, Uniform Fill, Fountain Fill, Tow-Color Fountain Fill, Preset, Fountain Fill, Pattern Fills, Two-Color, Full Color and Bitmap Pattern Fills, Texture Fills, PostScript texture Fills.
- Working with Curves: Introduction to Curves, Nodes and Segments, Drawing Freehand Tools, Drawing Closed Curves, Curved Objects, Selecting Node on a Curved Object, Adding, Removing and Joining Nodes. Bezier Tool, Drawing Curve with Bezier Tool, Drawing Straight Line with Bezier Tools Drawing with Artistic Media Tools using Preset and Brush Mode. Calligraphic Mode, Pressure- Sensitive Mode, Object Sprayer.

## Module IV: Effects of Tools (No. of classes required- 13) Practical exercise

- Special Effects: Introduction to Special Effects, Blending Tool, Contouring Objects, Distorting Objects, Envelop Tool, Extruding of the object, Vector Extrusion. Drop Shadow, Creating Drop Shadow, Changing Color of Drop Shadows, Removing Drop Shadows. Applying Lenses, Applying Perspectives. Filters, Gradients, Patterns, Textures, Swatches effects Layouts (Development of different types of Boards) Drawing Basic Male, Female and Kids Figure in Corel Draw with Grids and Guidelines and converting them into Objects. Drawing Basic Figure Forms (Legs, Arms, Heat etc.) with Grids and Guidelines

### **Module V: Printing and Exporting** (No. of classes required- 13) **Practical exercise**

- Printing and Exporting of files: Converting them into Objects. Saving and Exporting Images. File formats, opening, saving, importing, exporting, compression, printing, saving for Web, publishing as PDF, exporting images with transparency Printing Images.

### **Assignment for students-**

Documentation of all processes in one project report to be submitted the course instructor.

### **COURSE OUTCOMES:**

- **C.O.1:** To empower students with the knowledge of CAD and their applications so they can execute their ideas creatively through CAD.
- **C.O.2:** To describe the Corel draw work space, tools, shortcut keys and file formats.

- **C.O.3:** Toperform application of colours, colour swatches and various fill options by applying tracing and drawing tools.
- C.O.4: Todraw Basic Figure Forms with Grids and Guidelines

- Corel Draw 12: The Official Guide, Steve Bain, Dreamtech press, 2004
- CAD/CAM Computer Aided Design & Manufacturing by Mikell P Groover&Mory W Zimmers. Jr, Pearson Education Pub.2000
- Fashion Design on Computers by M. KathleenColursy, Prentice hall.2004
- CAD for fashion design by Renee Weiss Chase, Prentice hall Pub.

### ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Fashion Forecasting	L	T	P	СН	CR
Paper Code	DGMT3503	1	1	3	8	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **Course objectives:**

- Identify the who, what, where, why & when of Forecasting
- Define key terms and processes
- Explain the effects of changing fashion
- Identify key ideas and designers of each era
- Understand direction & speed of change in fashion movement
- Learn to create & present the forecast.

### **Course Outline:**

### Module I: Introduction to Fashion Forecasting (No. of classes required- 13)

- Terminologies, who forecasts fashion?
- Why forecast &how is it done?

### Module 2: Zeitgeist & Different eras in fashion (No. of classes required- 13)

- Victorian & Charles Worth
- Edwardian& World War 1
- Roaring Twenties & Flapper
- Great Depression & World War 2
- New Look & Fashion Conformity
- Mod & the Youth Revolution
- Street Fashion & the 'Me' Generation
- Post-Modernism & Time of excess
- Global Fashion & Internet Explosion
- New Millennium & Social Networking

### **Module 3: Fashion Movement**

(No. of classes required- 13)

- Fashion Cycles introduction, rise, culmination, decline & obsolescence.
- Theories of Fashion Adoption
- Pendulum Swings
- Speed of Fashion Change & Forecasting the Movement of Fashion
- Long Term & Short Term Forecasting
- Target Segmentation

### Module 4: Social & Cultural Influences Social & Cultural Influences

(No. of classes required- 13)

- Sociological & Physiological Influences on Fashion and how it shapes trends in Fashion.
- Collecting & Editing Information about various influences.
- Interpreting & Analyzing Information about Long Term Forecast.

### **Module 5: Market Research**

(No. of classes required- 13)

- Market Research & Identifying Theme, Colour, Textiles, Trims, Findings & Materials & Look for Forecast
- Creating & Presenting a Forecast.

### **COURSE OUTCOMES:**

- Students will be efficient in identifying a major and a minor trend.
- Will be able to predict a Fashion Forecast successfully
- Work for Forecasting agencies with the requisite knowledge.

- Fashion Forward -by Chelsea Rousso, Bloomsbury -2015
- Fashion Trend Forecasting, by Gwyneth Holland, 2017.
- Fashion Forecasting: Research Analysis & Presentation by Evelyn Brannon, 2004.

# ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Advance Draping Techniques	L	T	P	СН	CR
Paper Code	DGMT3504	0	2	3	6	5

Minimum number of classes per week: 5

Minimum number of classes: 65

### **Course Objective:**

- To enable students to make pattern by using dress form.
- To obtain perfect fit and harmony between the fabric and design of the garment.

### **Module 1: Preparation of basic Patterns** (No. of classes required- 21)

- Introduction: Preparation of fabric, Equipment needed, about dress form/dummies, Seam allowances/ease
- Preparation of basic Patterns by draping: Basic bodice front and back, Basic skirt front and back
- Dart manipulation/Variations in darts

### Module 2: Name and preparing samples (No. of classes required- 22)

- -Bodice variation princess line, yokes with gathers/pleats, Bustier
- Neckline Variations- v neck, u neck, square, inset, envelope, pot or glass, boat, decollete, scalloped, sweetheart, halter, cowl, asymetrical, modern variations
- Circular skirt, Pleated skirt, Gathered skirt, Pegged skirt, Yoke skirt, Panel skirt
- Draping of collars, on a body form using muslin cloth.
- Variations of skirts: A-line skirt, Circular skirt, Pleated skirt, Gathered skirt, Pegged skirt, Yoke skirt, Panel skirt

### **Module 3: construction practices** (No. of classes required- 22)

- Dresses: Bias cut dress, Sculptured Dress, Bustier Design, etc
- -Construction of any eight innovative garments using different themes, occasions, seasons (Fall Winter, Fall Spring, and Fall Autumn).
- Quality control check, finishing and packaging of the garment.

### **COURSE OUTCOMES:**

C.O.1: The student will be skill enough to start their own unit.

- Advanced drafting and draping by ManmeetSodhiaKalyani Publishers
- The art of fashion draping by Connie Amaden Crawford Fairchild

- Dress Fitting by Natalie Bray Blackwell Science

### ASSAM WOMEN'S UNIVERSITY SEMESTER IV

Paper Title	Computer Aided Designing- II	L	T	P	C H	CR
Paper Code	DGMT4501	0	2	3	6	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **OBJECTIVES:**

• To expose the students to different software.

### Course Outline -

**Module 1:** 

(No. of classes required- 13)

Theory

- Fashion Details/ Silhouette:

### **Practical exercise**

- Garments details-
- Creating effects: created by fashion details, elements of design.
- Drawing the details of the following in Corel Draw.
- Collar: Mandarin, High Bias, Tuxedo, Cape, Flat Tennis, Sailors, Chelsea, cowl, bishop.
- Sleeves: Raglan, Hanky, Tulip, Ruffle, Dolman, virago, flare, lantern, Dalmatian, pagoda.
- Pockets: Flap, Pouch, Patch, Cross, Slit, Kurta
- Skirts: Novelty Gathered, Hip rider, Trumpet, Pegged, Circular, Pleated, Straight, A-Line, straight fitted, fishtail, petal, peplum, puff ball.
- Trousers: Jeans, Straight Pants, Baggy Pants, Jump Suit, jogging pants, trouser skirt, Capri, hipsters, baggy jeans, bell bottoms, northern soul, riding habits.
- Illustrate above mention points.

### **Module 2:**

(No. of classes required- 13)

### **Practical exercise**

- Silhouette: A-Line shape, funnel shape, circular shape, straight shape, rectangular shape.
- Draping the above created details on fashion figures Importing, Saving and exporting images for the web.
- Design an executive wear along with accessories.

### **Module 3:**

(No. of classes required- 13)

### **Practical exercise**

- Creation of different Accessories: Bags, Belts, Shoes, Hats, Bows, Jewellery-specify each of items.
- Illustrating of different hairstyles.
- Logo and Labels designing

### **Module 4:**

(No. of classes required- 13)

### **Theory**

Introduction to different design software's for apparel designing.

### **Practical exercise**

- Illustration of different dress design and development of their pattern
- Illustration of Apparel Library.

### **COURSE OUTCOMES:**

C.O.1 The students will be able to establish a design studio.

- -Adobe Photoshop, 12.0
- -Gruman, Galen, Adobe in Design Cs2 Bible
- -Adobe Illustrator, 12.0
- -Lazer, Susan.H., Adobe Illustrator for Fashion Design
- -Golding, Mordy, Adobe Creative Suite 2

### ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Pattern making and garment construction-II	L	T	P	СН	CR
Paper Code	DGMT4502	1	2	2	7	5

Minimum number of classes per week: 5

Minimum number of classes: 65

### **Objectives:**

• To understand and co-relate design, pattern and manufacturing processes involved in garment industry.

### Course Outline -

### **Module 1:**

(No. of classes required- 13)

### **Theory**

- Developing drafting of Adult basic pattern Front Basic Bodice block, Back basic bodice block, basic skirt front and back, Basic Sleeve.
- Adaptation of basic sleeve: Puff sleeve, flared sleeve, Bell sleeve, Cap sleeve, Kimono sleeve, Raglan sleeve, Petal sleeve, Leg-o-mutton sleeve.

### **Practical exercise**

- Developing of Adult basic pattern Front Basic Bodice block, Back basic bodice block, basic skirt front and back, Basic Sleeve
- Development of various types of sleeves Puff sleeve, Flared sleeve, Bell sleeve, Cap sleeve, Kimono sleeve, Raglan sleeve, Petal sleeve, Leg-o-mutton sleeve.

### **Module 2:**

(No. of classes required- 13)

- Instruction, Drafting and construction Trouser and Shirt, designer blouse, Salwarkameez, Churidaarpajama, Pajama/ male pant, Designer evening gown, Designer party wear/short dress.

### **Module 3:**

(No. of classes required- 13)

### **Practical exercise**

Designing and construction of any five of the following-

- i. Blouse
- i. Ladies top
- ii. Skirts
- iii. Salwar suit
- iv. Night suit
- v. Long gown

vi. Kurta

vii. Pyjama

viii. Trouser

### Module 4: Practical exercise:

(No. of classes required- 13)

- Drafting and cutting patterns of all the above designs on full scale, with all specifications.
- Assignment / Seminar on recent trends on adult casual and formal wear garments.

### **COURSE OUTCOME:**

**C.O.1** The student will be able to design and construct garments appropriately to customer's satisfaction and needs.

- Advanced Drafting & Draping by ManmeetSodhia, Kalyani Publishers.
- Basic Processes and clothing const. by SherieDoongaji ,RajjPrakashan.
- Text book of clothing and textiles by Sushma Gupta, Kalyani Publishers.
- Pattern cutting made easy by Gillian Holman Batsford.
- Garment const. skills by Premlata Malik, Kalyani Publishers.

### ASSAM WOMEN'S UNIVERSITY SEMESTER III

Paper Title	Computer Aided Printed Textile Designing	L	T	P	C	CR
					H	
Paper Code	DGMT4503	1	2	2	6	5

Minimum number of classes per week: 5 Minimum number of classes in a semester: 65

### **OBJECTIVES**

• To introduce the students about the various concepts of textile designing through CAD.

### Module 1:

(No. of classes required- 16)

### **Theory**

- Introduction to Computer Aided Software (Corel draw, Adobe Photoshop, TUKA Studio)
- Learning about Corel Draw and Photoshop, different softwares.
- Uses of commands of different softwares.

### **Module 2:**

(No. of classes required- 16)

### **Practical exercise**

- Practicing the use of create a drawing with TUKA studio software commands.
- Preparation of samples with different colors, patterns, texture;
- Drawing basic motifs- Natural/floral, stylized, abstract and geometric;

### Module 3:

(No. of classes required- 16)

### **Practical exercise**

- Creating a designer logo,
- Developing designs for border patterns,
- Developing lattice for all over pattern- brick, diamond,
- Creation of pattern for apparel products.
- Creation of suitable background for border and all over patterns.

### **Module 4:**

(No. of classes required- 17)

### **Practical exercise**

- Assignment on different CAD textile designing aided software and their uses.
- A power point presentation and printed textile designing using CAD.

### **COURSE OUTCOMES**

C.O.1 The student will be skilled in design development using CAD software.

- Computer technology for textiles and apparel, edited by Jillian Hu
- Soft computing in textile engineering, edited by a. Mojumdar
- Davis L Msrisn. 1980. Visual Design in Dress. Prentice Hall.
- Prakash K. 1994. Impression A Classic Collection of Textile Designs. Design Points.
- Prakash K. 1995. Traditional Indian Motifs for Weaving & Textile Printing. Design Points.
- Rene Weiss Chase 1997. CAD for Fashion Design. Prentice Hall.
- Winfred Aldrich 1992. CAD in Clothing & Textiles. BSP Professional Books.
- Yates MP. 1996. Textiles A Handbook for Designers. W.W. Norton.

# ASSAM WOMEN'S UNIVERSITY SEMESTER IV

Paper Title	Entrepreneurship	L	T	P	СН	CR
Paper Code	DGMT4504	2	1	2	5	5

Minimum number of classes per week: 5

Minimum number of classes in a semester: 65

### **COURSE OBJECTIVES:**

- To explore the possibilities of becoming entrepreneurs.
- To enable the students aware about the inside of the garment Industry, its departments and personnel, jobs undertaken, references, Observations, Precautions, etc.

### **Module 1: Entrepreneurship**

(No. of classes required- 21)

### Entrepreneurship

### Theory

- Meaning, Importance, Evolution of term Entrepreneurship.
- Types of entrepreneur
- Factors influencing entrepreneurship Psychological factors, Social factors, Economic factor and environmental factors.
- Characteristics of an entrepreneur.
- Growth of entrepreneurship- role of entrepreneurship in economic development

### Assignment for students-

 Case study and report about any local successful entrepreneurs, their entrepreneurial startup and prepare the hurdles faced by them in establishing their business.

### **Module 2: Institutional Support to Entrepreneurs**

(No. of classes required- 22)

**Theory** 

- Institutional support to entrepreneurs Need for support National small Industries
  Corporations (NSIC), NIESUBD, NEBARD, PMEGP, SIDO, SSIDC, SISI, State
  Finance Corporations (SFC), District Industrial Centers (DICs), Small Industries
  Development Bank of India (SIDO), National Small Industries Corporation(NSIC)
- Financial assistance -state and central government banks-Financial incentives and subsidies.

### **Module 3: Women Entrepreneurs**

(No. of classes required- 22)

### **Theory**

- Concept of Entrepreneur
- Categories of Women Entrepreneurs
- Women in organized and unorganized sector, Women in traditional and modern industries, Women in urban and rural areas - Supportive Measures for Women's Economic Activities and Entrepreneurship
- Technological training and awards, Federations and associations.
- Problems of Women Entrepreneurs in India and Ways to Develop Women Entrepreneurs.
- Measures to Improve Women Entrepreneurship- Trade Related Entrepreneurship
  Assistance and Development (TREAD) scheme for women, MahilaVikasNidhi,
  Cooperative schemes, Government Yojanas like Oriental MahilaVikasYojana
  (OMVY), Udyogini Scheme (US), SukanyaSamriddhiYojana (SSY),
  MahilaUdyamNidhi Scheme (MUNS).
- Training programs Support for training and employment programme of Women (STEP), Women Entrepreneurship Platform (WEP), Training Programme on Skill Development of Women for Employability and Entrepreneurship (SDWEE).

### Assignment for students-

• Study about role of government in encouraging women Entrepreneurship in local region.

### **Industry Internship**

**Duration:** 4 weeks

### **Knowledge domain:**

- To conduct in depth study of a chosen industry.
- To know the basics of visual and written presentation techniques of the documentation.
- To know in details about the selected industries.

### **Contents:**

- Interpretation of industry project brief
- Report writing -The report should have detailed information about the industry,
  the type of industry(public sector/ private/ partnership), the names of directors, the
  departments of the industry, its personnel, the jobs being undertaken at the
  industry, the products being manufactured, the marketing of the products, the raw
  material being used, the clients, etc.
- The report should also include the work done by the student during his/ her training, specifying what all new was learned during this period.
- The report should be accompanied by the training certificate from the industry.
- It should be duly signed by the student.

### **COURSE OUTCOMES:-**

**CO1:-** The students will acquire necessary knowledge and skills required for organizing and carrying out entrepreneurial activities,

**CO2:-** Develop the ability of analyzing and understanding business situations.

- Entrepreneurship by MadhurimaLall, 2008.
- Entrepreneurship development by Vasant Desai, Himalaya Publishing House,
   2015.
- Harvard Business Review Entrepreneur's Handbook: Everything you Need to

- Launch and Grow your New Business by Harvard Business Review, 10 April 2018.
- Hand book of entrepreneurship development, Prepared and Published by: Dhaka Chamber of Commerce and Industry (DCCI) 65-66 Motijheel C/A, Dhaka-1000, Bangladesh, Editor: Md. Sabur Khan, President, DCCI, November 06, 2013.
- Kaulgud: Entrepreneurship Management, Vikas Publishing House.
- Khanaka, S.S., Entrepreneurial Development, S. Chand and Company Ltd., New Delhi, (2006).