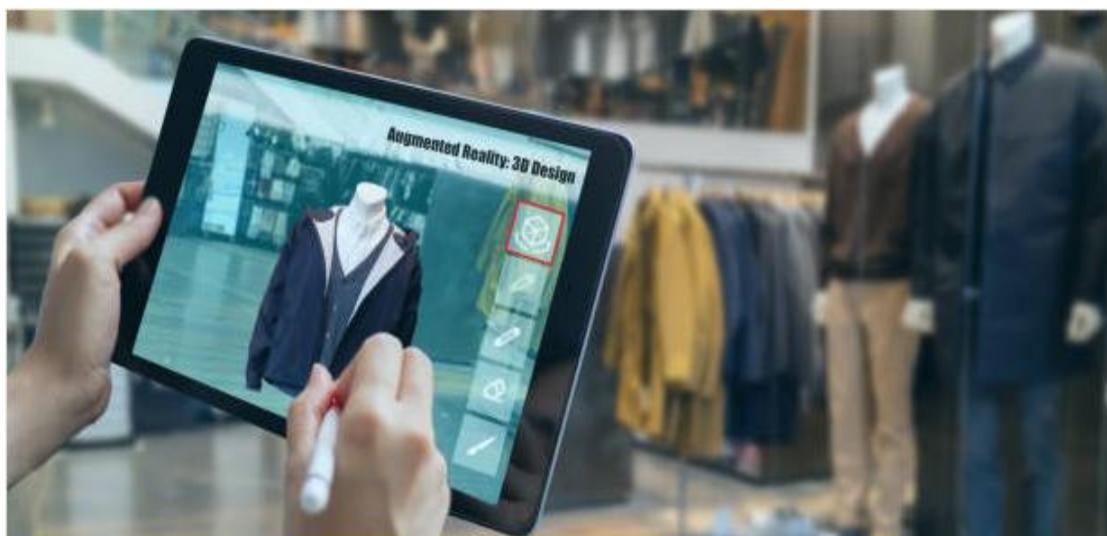


# **COMPETENCY BASED CURRICULUM**

## **DIPLOMA IN FASHION DESIGN**

**(Duration 03 Years)  
NSQF Level – 5**



**Under  
Haryana State Board of Technical Education**



**Developed By**  
**Curriculum Development Center**  
**National Institute of Technical Teachers Training & Research**  
**(Ministry of Education, Government of India)**  
**Sector - 26, Chandigarh, UT, India.**  
**(September, 2024)**

## PREFACE

Learning and learning experience are the foundation of any education system. Appropriateness of education and its useful implications stand on the platform of knowledge and skill. But the knowledge and skill cannot be quantified qualitatively without ensuring learning experience. Curriculum is the pathway to select and organise learning experience. It helps the teachers to provide tangible resources, goals and objectives to learners. Curriculum acts as a catalyst to stimulate creativity, innovation, ethics, values, responsibility and many human factors. Curriculum embodies rigour and high standards and creates coherence to empower learner to meet the industrial and societal needs. Curriculum is a central guide for a teacher to plan a standard based sequence for the instructional delivery.

The industrial revolution 4.0 has forced the technical education system to reinvent the curriculum to meet the human resource requirement of the industry. The data driven systems relying on the subjects like machine-learning, Artificial Intelligence, Data Science etc are literally forcing the technical education system to offer different subjects differently to address the emerging challenges. The non-linear way of learning now facilitates students to choose path of knowledge to skill or vice-versa. The bi-directional process requires innovative curriculum design and revision. Diploma programme is now more challenging than ever. The level of skill and knowledge demanded by industry from diploma holders are highly interdisciplinary at the same time address special need. Hence, there is a need to align the curriculum to National Skill Qualification Framework (NSQF).

National Education Policy, NEP-2020 has now opened up diversities for the education system to explore and exploit to make the education relevant. The policy emphasises to inculcate value, ethics, respect to culture and society etc along with industry ready knowledge and skill among the students. The interdisciplinary nature of curriculum, academic bank of credits and integration of technology in teaching-learning envisaged in NEP-2020 make it more challenging for curriculum development. NITTTR, Chandigarh has developed the art of curriculum development over 54 years of its existence. The expertise and experience available in the institute follow time-tested and acclaimed scientific methods to design/revise curriculum. The experienced faculty members entrusted with the curriculum development or revision activities are well-versed with NSQF, NEP and Outcome based education. I am happy to note that **Haryana State Board of Technical Education, Panchkula, Haryana** reposed their confidence on this expertise to develop **AICTE/NSQF/NEP 2020** aligned curriculum for the state. This documented curriculum is an outcome of meticulous planning and discussions among renowned experts of the subject through series of workshops. The effective implementation of this curriculum supported with quality instructional resources will go a long way in infusing the learning experience among learners to make them industry ready.

**Director**  
**National Institute of Technical Teachers Training & Research, Chandigarh**

## **ACKNOWLEDGEMENT**

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**Professor & Head**  
**Curriculum Development Center**  
**National Institute of Technical Teachers Training & Research, Chandigarh**

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## 1. SALIENT FEATURES

1. Name : **Diploma in Fashion Design**
2. Duration : **03 Years**
3. Hours per week : **35**
4. Entry Qualification : **10<sup>th</sup> Pass**
5. Student Intake : **As per sanctioned strength**
6. Pattern : **Semester**
7. Scheme : **Multi Point Entry and Exit**
8. NSQF Level : **5**
9. Theory Practical Ratio : **29 : 71**
10. Project Work : **Minor and Major Project**
11. In-house/Industrial Training : **Mandatory after First and Second Year**

## 2. NSQF GUIDELINES

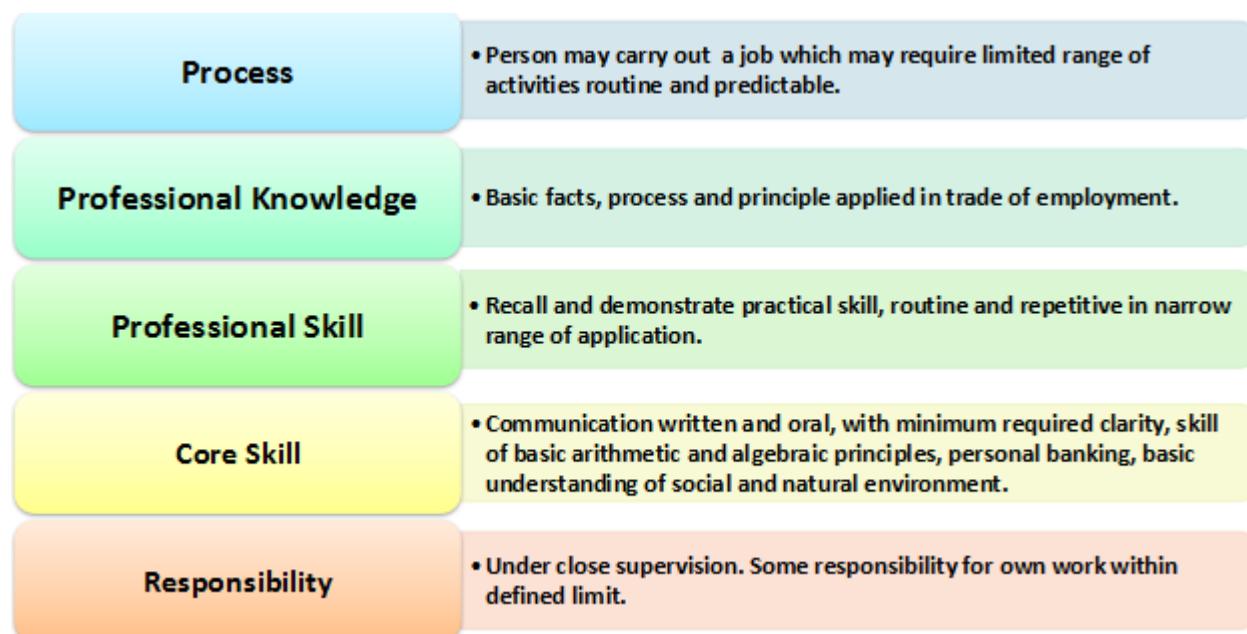
National Skill Qualification Framework has defined total Ten Levels. Each level of the NSQF is associated with a set of descriptors made up of five outcome statements, which describe in general terms, the minimum knowledge, skills and attributes that a learner needs to acquire in order to be certified for that level.



**Fig1: NSQF Domains**

### NSQF LEVEL - 3 COMPLIANCE

The NSQF level - 3 descriptor is as follows:



**Fig 2: NSQF Level – 3 Descriptor**

Work requiring knowledge, skills and aptitudes at level 3 will be routine and predictable. Job holders will be responsible for carrying out a limited range of jobs under close supervision. Their work may require the completion of a number of related tasks. People carrying out these job roles may be described as “Semi skilled workers”. Individuals in jobs which require level 3 qualifications will normally be expected to be able to communicate clearly in speech and writing and may be required to use arithmetic and algebraic processes. They will be expected to have previous knowledge and skills in the occupation and should know the basic facts, processes and principles applied in the trade for which they are qualified and be able to apply the basic skills of the trade to a limited range of straightforward jobs in the occupation.

They will be expected to understand what constitutes quality in their job role and more widely in the sector or sub-sector and to distinguish between good and bad quality in the context of the jobs they are given. Job holders at this level will be expected to carry out the jobs they are given safely and securely. They will work hygienically and in ways which show an understanding of environmental issues. This means that they will be expected to take responsibility for their own health and safety and that of fellow workers and, where appropriate, customers and/or clients. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social environment. They should be able to make a good contribution to team work.

## NSQF LEVEL - 4 COMPLIANCE

The NSQF level-4 descriptor is given below:

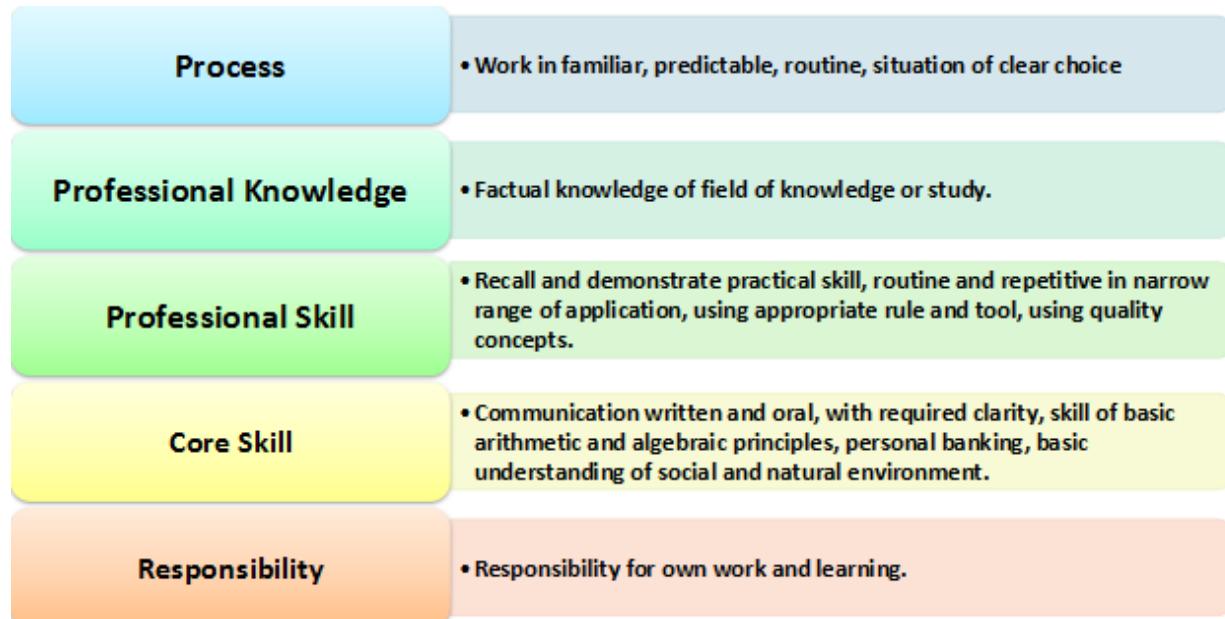


Fig 3: NSQF Level – 4 Descriptor

Work requiring knowledge, skills and aptitudes at level 4 will be carried out in familiar, predictable and routine situations. Job holders will be responsible for carrying out a range of jobs, some of which will require them to make choices about the approaches they adopt. They will be expected to learn and improve their practice on the job. People carrying out these jobs may be described as “skilled workers”. Individuals in jobs which require level 4 qualifications should be able to communicate clearly in speech and writing and may be required to use arithmetic and algebraic processes. They will be expected to have previous knowledge and skills in the occupation in which they are employed, to appreciate the nature of the occupation and to understand and apply the rules which govern good practice. They will be able to make choices about the best way to carry out routine jobs where the choices are clear.

They will be expected to understand what constitutes quality in the occupation and will distinguish between good and bad quality in the context of their job roles. Job holders at this level will be expected to carry out their work safely and securely and take full account of the health and safety on colleagues and customers. They will work hygienically and in ways which show an understanding of environmental issues. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social and political environment. They should be able to guide or lead teams on work within their capability.

## NSQF LEVEL - 5 COMPLIANCE

The NSQF level-5 description is given below:

<b>Process</b>	• Job that requires well developed skill, with clear choice of procedures in familiar context.
<b>Professional Knowledge</b>	• Knowledge of facts, principles, processes and general concepts, in a field of work or study.
<b>Professional Skill</b>	• A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.
<b>Core Skill</b>	• Desired mathematical skill; understanding of social, political; and some skill of collecting and organising information, communication.
<b>Responsibility</b>	• Responsibility for own work and learning and some responsibility for others' works and learning

**Fig 4: NSQF Level – 5 Descriptor**

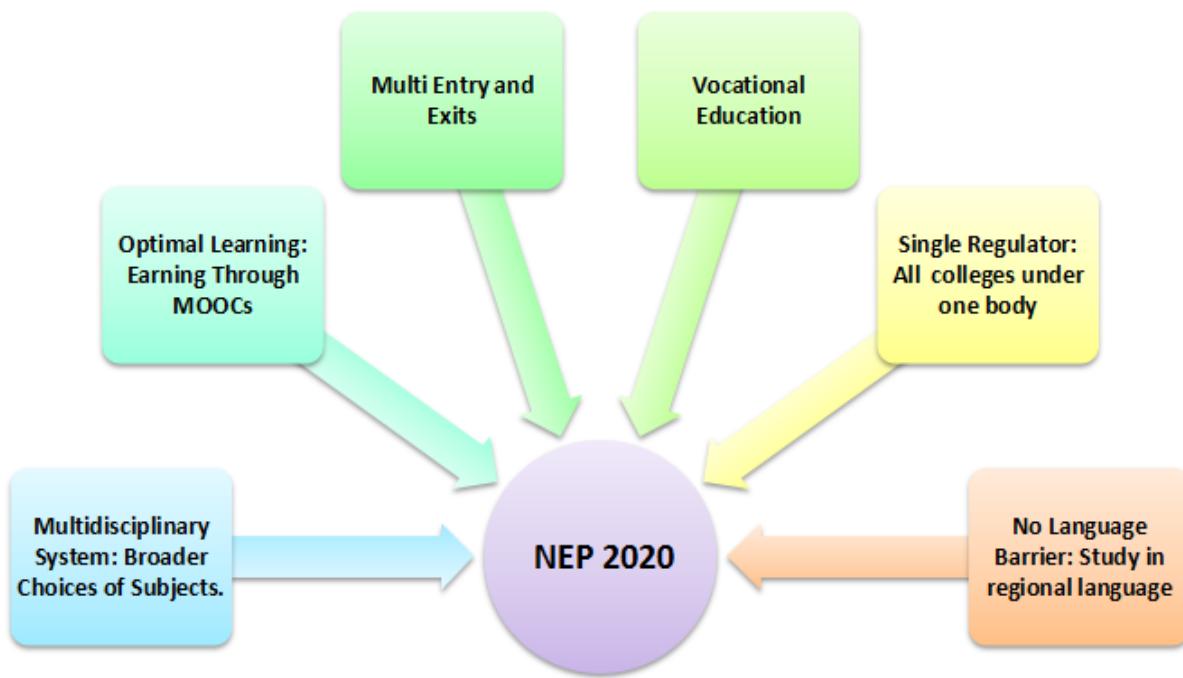
Work requiring knowledge, skills and aptitudes at level 5 will also be carried out in familiar situations, but also ones where problems may arise. Job holders will be able to make choices about the best procedures to adopt to address problems where the choices are clear. Individuals in jobs which require level 5 qualifications will normally be responsible for the completion of their own work and expected to learn and improve their performance on the job. They will require well developed practical and cognitive skills to complete their work. They may also have some responsibility for others' work and learning. People carrying out these jobs may be described as "fully skilled workers" or "supervisors".

Individuals employed to carry out these jobs will be expected to be able to communicate clearly in speech and writing and may be required to apply mathematical processes. They should also be able to collect and organise information to communicate about the work. They will solve problems by selecting and applying methods, tools, materials and information. They will be expected to have previous knowledge and skills in the occupation, and to know and apply facts, principles, processes and general concepts in the occupation. They will be expected to understand what constitutes quality in the occupation and will distinguish between good and bad quality in the context of their work. They will be expected to operate hygienically and in ways which show an understanding of environmental issues. They will take account of health and safety issues as they affect the work they carry out or supervise.

In working with others, they will be expected to conduct themselves in ways which show an understanding of the social and political environment.

### 3. NATIONAL EDUCATION POLICY (NEP) - 2020

NEP 2020 aims at a comprehensive holistic education to develop all capacities of human beings - intellectual, aesthetic, social, physical, emotional, and moral - in an integrated manner. A holistic arts education will help develop well-rounded individuals that possess: critical 21st century capacities in fields across the arts, humanities, languages, sciences, social sciences, and professional, technical, and vocational fields; an ethic of social engagement; soft skills, such as communication, discussion and debate; and rigorous specialization in a chosen field or fields. Such a holistic education shall be, in the long term, the approach of all undergraduate programmes, including those in professional, technical, and vocational disciplines.



**Fig 5: NEP 2020**

Flexibility in curriculum and novel and engaging course options will be on offer to students, in addition to rigorous specialisation in a subject or subjects. Pedagogy for courses will strive for significantly less rote learning and an increased emphasis on communication, discussion, debate, research, and opportunities for cross-disciplinary and interdisciplinary thinking. The flexible and innovative curriculum shall emphasize on offering credit-based courses and projects in the areas of community engagement and service, environmental education and value-based education. As part of a holistic education, students will be provided with opportunities for internships with local industry, businesses, artists, crafts persons, villages and local communities, etc., as well as

research internships with faculty and researchers at their own or other HEIs or research institutions, so that students may actively engage with the practical side of their learning and, as a by-product, further improve their employability.

Effective learning requires relevant curriculum, engaging pedagogy, continuous formative assessment and adequate student support. The curriculum must be updated regularly aligning with the latest knowledge requirements and shall meet specified learning outcomes. High-quality pedagogy is then necessary to successfully impart the curricular material to students; pedagogical practices determine the learning experiences that are provided to students - thus directly influencing learning outcomes. The assessment methods have to be scientific and test the application of knowledge. Higher Education Institutes should move to a criterion-based grading system that assesses student achievement based on the learning goals for each programme, making the system fairer and outcomes more comparable. HEIs should also move away from high-stakes examinations towards more continuous and comprehensive evaluation.

## 4. PROGRAMME OUTCOMES

The programme outcomes are derived from five domains of NSQF Level namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this programme, the student will be able to:

PO1: Perform tasks in limited range of activities, familiar situation with clear choice of procedures.

PO2: Acquire knowledge of principles and processes in the field of Fashion Design.

PO3: Develop skills to accomplish quality tasks and solve problems using methods, tools, materials and information.

PO4: Demonstrate skill of communication, collecting and organizing information along with knowledge of social, political and natural environment.

PO5: Take the responsibility of own works and supervises others work.

PO6: Select multidisciplinary and open subjects of own interest and perform self learning through Massive Open Online Courses.

## 5. DERIVING CURRICULUM AREAS FROM PROGRAMME OUTCOMES

The following curriculum areas have been derived from Programme outcomes:

Sr. No.	Programme Outcomes	Curriculum Subjects / Areas
1.	Perform tasks in limited range of activities, familiar situation with clear choice of procedures.	<ul style="list-style-type: none"> <li>• Basic Design &amp; Illustration</li> <li>• Fundamentals of Pattern Making</li> <li>• Garment Workshop</li> <li>• Textile Science</li> <li>• Basic Pattern Making and Garment Construction</li> <li>• Crafts of India</li> <li>• Traditional Indian Textiles</li> <li>• Pattern Making and Garment Construction</li> <li>• CAD in Fashion Design – I</li> <li>• Accessory Designing</li> <li>• CAD in Fashion Design –II</li> <li>• Advanced Pattern Making and Garment Construction</li> <li>• Fashion Sourcing</li> <li>• Programme Elective – I</li> <li>• Fabric Designing</li> <li>• Portfolio using CAD</li> <li>• Programme Elective - II</li> </ul>
2.	Acquire knowledge of principles and processes in the field of Fashion Design.	<ul style="list-style-type: none"> <li>• Basic Design &amp; Illustration</li> <li>• Fundamentals of Pattern Making</li> <li>• Theory of Fashion</li> <li>• Textile Science</li> <li>• History of Fashion</li> <li>• Traditional Indian Textiles</li> <li>• Fashion Retailing</li> <li>• Design to Dispatch</li> <li>• Apparel Management and Quality Control</li> <li>• Accessory Designing</li> <li>• Fashion Merchandising</li> <li>• Programme Elective - I</li> <li>• Programme Elective - II</li> </ul>
3.	Develop skills to accomplish quality tasks and solve problems using methods, tools, materials and information.	<ul style="list-style-type: none"> <li>• Basic Design &amp; Illustration</li> <li>• Fundamentals of Pattern Making</li> <li>• Garment Workshop</li> </ul>

	<ul style="list-style-type: none"> <li>• Textile Science</li> <li>• Basic Pattern Making and Garment Construction</li> <li>• Crafts of India</li> <li>• Traditional Indian Textiles</li> <li>• Pattern Making and Garment Construction</li> <li>• CAD in Fashion Design – I</li> <li>• Accessory Designing</li> <li>• CAD in Fashion Design –II</li> <li>• Advanced Pattern Making and Garment Construction</li> <li>• Fashion Sourcing</li> <li>• Programme Elective – I</li> <li>• Fabric Designing</li> <li>• Portfolio using CAD</li> <li>• Programme Elective - II</li> </ul>
4.	<p>Demonstrate skill of communication, collecting and organizing information along with knowledge of social, political and natural environment.</p> <ul style="list-style-type: none"> <li>• English and Communication Skills I</li> <li>• Fundamentals of IT</li> <li>• Environmental Studies &amp; Disaster Management</li> <li>• Industrial/In-House Training – I</li> <li>• English and Communication Skills – II</li> <li>• Minor Project</li> <li>• Industrial Training – II</li> <li>• Entrepreneurship Development &amp; Management</li> <li>• Industrial Internship / Major Project</li> </ul>
5.	<p>Take the responsibility of own works and supervises others work.</p> <ul style="list-style-type: none"> <li>• Garment Workshop</li> <li>• Basic Pattern Making and Garment Construction</li> <li>• Crafts of India</li> <li>• Industrial/In-House Training - I</li> <li>• Minor Project</li> <li>• Industrial Training – II</li> <li>• Industrial Internship / Major Project</li> </ul>
6.	<p>Select multidisciplinary and open subjects of own interest and perform self learning through Massive Open Online Courses.</p> <ul style="list-style-type: none"> <li>• Multidisciplinary Elective</li> <li>• Open Elective</li> </ul>

# **FIRST YEAR**

## **NSQF LEVEL - 3**

**FIRST YEAR****6. STUDY CUM EVALUATION SCHEME****FIRST SEMESTER**

Sr. No.	SUBJECTS	STUDY SCHEME		Credits (C) (L + P = C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		Periods/Week			INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	P		Th	Pr	Total	Th	Pr	Total			
1.1	*English &Communication Skills– I	2	2	2 + 1 = 3	40	40	80	60	60	120	200		
1.2	Basic Design & Illustration	4	4	4 + 2 = 6	40	40	80	60	60	120	200		
1.3	Fundamentals of Pattern Making	4	4	4 + 2 = 6	40	40	80	60	60	120	200		
1.4	Garment Workshop	-	6	0 + 3 = 3	-	40	40	-	60	60	100		
1.5	*Fundamentals of IT	2	4	2 + 2 = 4	40	40	80	60	60	120	200		
# Student Centered Activities(SCA)		-	3	-	-	-	-	-	-	-	-		
Total		12	23	22	160	200	360	240	300	540	900		

\* Common with other Diploma Courses.

# Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India etc, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.

**SECOND SEMESTER**

Sr. No.	SUBJECTS	STUDY SCHEME		Credits (C) (L + P = C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		Periods/Week			INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	P		Th	Pr	Total	Th	Pr	Total			
2.1	Theory of Fashion	4	-	4 + 0 = 4	40	-	40	60	-	60	100		
2.2	Textile Science	4	2	4 + 1 = 5	40	40	80	60	60	120	200		
2.3	History of Fashion	3	-	3 + 0 = 3	40	-	40	60	-	60	100		
2.4	Crafts of India	-	8	0 + 4 = 4	-	40	40	-	60	60	100		
2.5	Basic Pattern Making and Garment Construction	-	8	0 + 4 = 4	-	40	40	-	60	60	100		
2.6	*Environmental Studies & Disaster Management	2	-	2 + 0 = 2	40	-	40	60	-	60	100		
# Student Centered Activities (SCA)		-	4	-	-	-	-	-	-	-	-		
<b>Total</b>		<b>13</b>	<b>22</b>	<b>22</b>	<b>160</b>	<b>120</b>	<b>280</b>	<b>240</b>	<b>180</b>	<b>420</b>	<b>700</b>		

\* Common with other Diploma Courses

# Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India etc, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.

**In-house Training:** After 2<sup>nd</sup> semester, students shall undergo Summer Training of minimum 4 Weeks.

## 7. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION

<b>Sr. No.</b>	<b>Subjects</b>	<b>Hours Per Week</b>	
		<b>First Semester</b>	<b>Second Semester</b>
1.	English and Communication Skills – I	4	-
2.	Basic Design & Illustration	8	-
3.	Fundamentals of Pattern Making	8	-
4.	Garment Workshop	6	-
5.	Fundamentals of IT	6	-
6.	Theory of Fashion	-	4
7.	Textile Science	-	6
8.	History of Fashion	-	3
9.	Crafts of India	-	8
10.	Basic Pattern Making and Garment Construction	-	8
11.	Environmental Studies & Disaster Management	-	2
12.	Student Centered Activities	3	4
<b>Total</b>		<b>35</b>	<b>35</b>

## 8. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

In government and private sectors related to **Fashion Design**, “**Semi Skilled workers**” are required to carry out a limited range of predictable tasks under close supervision. They are expected to communicate in written or oral with required clarity along with basic understanding of social and natural environment. They should know the basic facts, limited processes and principles relevant to Fashion Design.

Fashion Design students after NSQF Level – 3 are expected to demonstrate skill in fashion illustration and basics of pattern making and styling of garments. They are supposed to fabricate various components of garments such as pleats and gather, darts, tucks etc., as per measurements for mass production of all ages and sizes. They are also expected to have good understanding of fashion, fashion terminologies and movement of fashion along with insight knowledge about International trade in fashion and Regulatory bodies in fashion industry. These students should have basic fundamental knowledge about fibers, yarns, fabric structure, dyeing, printing, finishing and relevant properties affecting the ultimate performance and use of fabrics by the consumer.

Fashion Design students should be able to appreciate ancient civilization, the fashion that existed in the different periods, their contribution in shaping the present and promoting the future trends in the field of fashion. They should also have a basic knowledge of traditional costumes of different regions of India and their impact on today's fashion. They are expected to demonstrate skills related to Basic Pattern Making and Garment Construction. They should be able to convert the designs in to garment by drafting and developing basic patterns, stitching them into complete garments and give them a finishing touch, from scratch with the developed technical skills. They shall be well familiar with various crafts practiced in all regions of India for polishing their creativity.

They are expected to recall and demonstrate practical routine and repetitive skills, in narrow range of Fashion Design applications. They have wide scope to work as semi skilled worker in export houses, import houses, domestic industries, freelancer in different activities related to fashion designing, fashion merchandising in marketing, production and quality control units in garment manufacturing industries. They can start their own small start up in the area of marketing, sales, manufacturing and production etc.

## 9. PROGRAMME OUTCOMES

The programme outcomes are derived from five domains of NSQF Level – 3 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this programme, the student will be able to:

**PO1:** Carry out a task which may require limited range of predictable activities.

**PO2:** Acquire knowledge of Basic facts, process and principles related to Fashion Design for wage and self employment.

**PO3:** Demonstrate practical skill in narrow range of fashion design related applications.

**PO4:** Communicate in written and oral, with minimum required clarity along with basic understanding of social and natural environment.

**PO5:** Perform task under close supervision with some responsibility for own work within defined limit.

## 10. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

<b>Programme Outcomes to be assessed</b>	<b>Assessment criteria for the Course Outcomes</b>
<p><b>PO1:</b> Carry out a task which may require limited range of predictable activities.</p>	<ul style="list-style-type: none"> <li>• Create the stylized fashion illustration.</li> <li>• Create Design and present them effectively.</li> <li>• Develop basic blocks from measurement charts and body measurements.</li> <li>• Manipulate the patterns using darts.</li> <li>• Identify the various parts and their functions in a sewing machine.</li> <li>• Recognize various problems and solutions of sewing machine.</li> <li>• Distinguish various stitches and seams classifications.</li> <li>• Develop different types of plackets.</li> <li>• Design necklines and attach collars.</li> <li>• Construct sleeves and attach cuffs.</li> <li>• Sketch draft and stitch basic skirt</li> <li>• Create draft and stitch basic top</li> <li>• Classify the crafts of Northern India.</li> <li>• Summarize the crafts of Western India.</li> <li>• Differentiate the crafts of Central and Northeastern India.</li> </ul>
<p><b>PO2:</b> Acquire knowledge of Basic facts, process and principles related to Fashion Design for wage and self employment.</p>	<ul style="list-style-type: none"> <li>• Classify the application of Elements of Design.</li> <li>• Summarize the application of colors in Design.</li> <li>• Clarify the application of Principles of Design.</li> <li>• Clarify the basic terminology of pattern making.</li> <li>• Summarize the concept of measurements and pattern making tools.</li> <li>• Classify the terminology of various garments and details.</li> <li>• Understand the fundamental aspects of fashion.</li> </ul>

	<ul style="list-style-type: none"> <li>• Summarize the fashion cycle and fashion theories.</li> <li>• Clarify the Principles of fashion and Fashion forecasting.</li> <li>• Classify the International trade in fashion and Regulatory bodies.</li> <li>• Predict the National and International Fashion Labels.</li> <li>• Study fashion history as a source of research for developing new collections.</li> <li>• Learn the history of clothing and costume.</li> <li>• Classify the role of multiple factors influencing fashion.</li> <li>• Clarify appropriate terminology related to fashion history.</li> <li>• Summarize the evolution of fashion.</li> </ul>
<b>PO3:</b> Demonstrate practical skill in narrow range of fashion design related applications.	<ul style="list-style-type: none"> <li>• Create the stylized fashion illustration.</li> <li>• Create Design and present them effectively.</li> <li>• Develop basic blocks from measurement charts and body measurements.</li> <li>• Manipulate the patterns using darts.</li> <li>• Identify the various parts and their functions in a sewing machine.</li> <li>• Recognize various problems and solutions of sewing machine.</li> <li>• Distinguish various stitches and seams classifications.</li> <li>• Develop different types of plackets.</li> <li>• Design necklines and attach collars.</li> <li>• Construct sleeves and attach cuffs.</li> <li>• Sketch draft and stitch basic skirt</li> </ul>

	<ul style="list-style-type: none"> <li>• Create draft and stitch basic top</li> <li>• Classify the crafts of Northern India.</li> <li>• Summarize the crafts of Western India.</li> <li>• Differentiate the crafts of Central and Northeastern India.</li> </ul>
<b>PO4:</b> Communicate in written and oral, with minimum required clarity along with basic understanding of social and natural environment.	<ul style="list-style-type: none"> <li>• Identify the nuances of Communication, both Oral and Written.</li> <li>• Acquire knowledge of the meaning of communication, communication process and speaking skills.</li> <li>• Acquire enhanced vocabulary and in-depth understanding of Grammatical Structures and their usage in the communication.</li> <li>• Communicate effectively with an increased confidence to read, write and speak in English language fluently.</li> <li>• Understand the basic components of Computers, Internet and issues of abuses/ attacks on information and computers.</li> <li>• Use comfortably Computer, Laptop, Mobiles, Internet Utilities and Install / Configure OS.</li> <li>• Assemble a PC and connect it to external devices.</li> <li>• Work with Office Practiced Automation Tools.</li> <li>• Create worksheets and Prepare presentations.</li> <li>• Comprehend the importance of sustainable ecosystem.</li> <li>• Clarify interdisciplinary nature of environmental issues.</li> <li>• Describe corrective measures for the abatement of pollution.</li> <li>• Identify the role of non-conventional energy resources in environmental protection.</li> <li>• Recognize various types of disasters.</li> </ul>
<b>PO5:</b> Perform task under close supervision with some responsibility for own work within defined limit.	<ul style="list-style-type: none"> <li>• Operate and control sewing machine for garment construction.</li> <li>• Attach various fasteners to the garment.</li> </ul>

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|--|--|
|  | <ul style="list-style-type: none"><li>• Develop different types of plackets.</li><li>• Design necklines and attach collars.</li><li>• Construct sleeves and attach cuffs.</li><li>• Sketch draft and stitch basic skirt</li><li>• Create draft and stitch basic top</li><li>• Classify the crafts of Northern India.</li><li>• Determine the crafts of Eastern India.</li><li>• Summarize the crafts of Western India.</li><li>• Judge the crafts of Southern India.</li><li>• Differentiate the crafts of Central and Northeastern India.</li></ul> |
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## **11. SUBJECTS & CONTENTS (FIRST YEAR)**

## FIRST SEMESTER

1.1	English and Communication Skills – I	20 - 22
1.2	Basic Design & Illustration	23 - 25
1.3	Fundamentals of Pattern Making	26 - 28
1.4	Garment Workshop	29 - 30
1.5	Fundamentals of IT	31 - 34

## 1.1 ENGLISH & COMMUNICATION SKILLS – I

<b>L</b>	<b>P</b>
<b>2</b>	<b>2</b>

### **RATIONALE**

Language as the most commonly used medium of self-expression remains indispensable in all spheres of human life –personal, social and professional. This course is intended to break fresh ground in teaching of Communicative English as per the requirements of National Skill Quality Framework. This course is designed to help students to acquire the concept of communication and develop ability or skills to use them effectively to communicate with the individuals and community.

### **COURSE OUTCOMES**

After undergoing this course, the students will be able to:

- CO1: Identify the nuances of Communication, both Oral and Written.
- CO2: Acquire knowledge of the meaning of communication, communication process and speaking skills.
- CO3: Acquire enhanced vocabulary and in-depth understanding of Grammatical Structures and their usage in the communication.
- CO4: Communicate effectively with an increased confidence to read, write and speak in English language fluently.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Reading**

- 1.1 Techniques of reading: Skimming and Scanning
- 1.2 Extensive and Intensive Reading: Textual Study
- 1.3 Homecoming – R.N. Tagore
- 1.4 Life Sketch of Sir Mokshagundam Visvesvarayya
- 1.5 Life Sketch of Dr. Abdul Kalam
- 1.6 Narayan Murthy's speech at LBSNA, Dehradun

#### **UNIT II**

##### **Fundamentals of Communication**

- 2.1 Concept and Process of Communication,
- 2.2 Types of Communication (Verbal Communication)
- 2.3 Barriers to Communication

- 
- 2.4 Speaking Skill: Significance and essentials of Spoken Communication
  - 2.5 Listening Skill: Significance and essentials of Listening

### **UNIT III**

#### **Grammar and Usage**

- 3.1 Nouns
- 3.2 Pronouns
- 3.3 Articles
- 3.4 Verbs(Main and Auxiliary)
- 3.5 Tenses

### **UNIT IV**

#### **Writing Skills**

- 4.1 Significance, essentials and effectiveness of Written Communication
- 4.2 Notice Writing
- 4.3 Official Letters and E-mails.
- 4.4 Frequently-used Abbreviations used in Letter-Writing
- 4.5 Paragraph Writing
- 4.6 Netiquettes

### **PRACTICAL EXERCISES**

#### **1 READING**

- Reading Practice of lessons in the Lab Activity classes.
- i. Comprehension exercises of unseen passages along with the lessons prescribed.
  - ii. Vocabulary enrichment and grammar exercises based on the selected readings.
  - iii. Reading aloud Newspaper headlines and important articles.

#### **2 FUNDAMENTALS OF COMMUNICATION**

- i. Introducing oneself, others and leave- taking(talking about yourself)
- ii. Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
- iii. Situational Conversation: Offering-Responding to offers; Congratulating; Apologising and Forgiving; Complaining; Talking about likes and dislikes, Self-introduction Mock Interviews.

#### **3 GRAMMAR AND USAGE**

- i. Written and Oral Drills will be undertaken in the class to facilitate holistic linguistic competency among learners.
  - ii. Exercises on the prescribed grammar topics.
-

#### **4 WRITING SKILLS**

- i. Students should be given Written Practice in groups so as to inculcate team-spirit and collaborative learning .
- ii. Group exercises on writing paragraphs on given topics.
- iii. Opening an e-mail account, receiving and sending emails

#### **RECOMMENDED BOOKS**

- 1) Alvinder Dhillon and Parmod Kumar Singla, “Text Book of English and Communication Skills Vol – 2”, M/S Abhishek Publications, Chandigarh.
- 2) V Sasikumar & PV Dhamija, “Spoken English”, Tata MC Graw Hills, New Delhi, Second Edition.
- 3) JK Gangal, “A Practical Course in Spoken English”, PHI Learning Pvt. Ltd., New Delhi.
- 4) NK Aggarwal and FT Wood, “English Grammar, Composition and Usage”, Macmillan Publishers India Ltd., New Delhi.
- 5) RC Sharma and Krishna Mohan, “Business Correspondence & Report writing”, Tata MC Graw Hills, New Delhi, Fourth Edition.
- 6) Kavita Tyagi & Padma Misra, “Professional Communication”, PHI Learning Pvt. Ltd., New Delhi.
- 7) Nira Konar, “Communication Skills for professionals”, PHI Learning Pvt. Ltd., New Delhi.
- 8) Krishna Mohan & Meera Banerji, “Developing Communication Skills”, Macmillan Publishers India Ltd., New Delhi, Second Edition
- 9) M. Ashraf Rizwi, “Effective Technical Communication”, Tata MC Graw Hills, New Delhi.
- 10) Andrea J Rutherford, “Basic Communication Skills for Technology”, Pearson Education, New Delhi.

#### **INSTRUCTIONAL STRATEGY**

This is practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required communication skills in the students. This subject contains four units of equal weight age.

## 1.2 BASICS DESIGN & ILLUSTRATION

<b>L</b>	<b>P</b>
<b>4</b>	<b>4</b>

### **RATIONALE**

The knowledge and skill related to basic design is essential for developing the understanding in students to make a design using elements and principles of design. The skill in fashion illustration is essential for development of creativity and ability to illustrate different types of figures and dresses.

### **COURSE OUTCOMES**

After finishing the course, the students shall be able to:

- CO1: Classify the application of Elements of Design.
- CO2: Summarize the application of colors in Design.
- CO3: Create the stylized fashion illustration.
- CO4: Clarify the application of Principles of Design
- CO5: Create Design and present them effectively

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Elements of Design**

Understanding various elements of Design (Dot, Line, Shape, Colors (Psychological aspect) and Texture their types and use.

#### **UNIT II**

##### **Understanding Color**

Color wheel- primary colors, secondary, Tertiary colors, color schemes, hue, tint, tone and shade of color.

#### **UNIT III**

##### **Fashion Illustration**

Drawing 8 head and 10 head box figure, creating flesh figure out of box figure, draping dresses on flesh figure and rendering the illustration, Stylized Illustration.

**UNIT IV****Principles of Design**

Understanding various Principles of Design (Rhythm, Balance, Emphasis, Harmony, and Proportion) their types and use.

**UNIT V****Basic Styles**

Types of Necklines, collars, pockets, sleeves, skirts, pants, tops and silhouettes.

**PRACTICAL EXERCISES**

1. Sheet demonstrating various types of Dots
2. Sheet demonstrating various types of Lines
3. Sheet demonstrating various types of Shapes
4. Sheet demonstrating various types of Textures
5. Sheet demonstrating Color Wheel
6. Sheet demonstrating Tint, Tone and Shade
7. Sheet demonstrating Warm and Cool colors
8. Sheet demonstrating various color schemes
9. Sheet demonstrating 8 head box and flesh figure
10. Sheet demonstrating 10 head box and flesh figure
11. Sheet demonstrating various pose of legs
12. Sheet demonstrating body balance
13. Sheet demonstrating technical points of garment draping in illustration
14. Sheets of backgrounds using various techniques
15. Sheets (5 nos.) demonstrating Stylized Illustration
16. Sheet demonstrating Rhythm in Design
17. Sheet demonstrating Balance in Design
18. Sheet demonstrating Emphasis in Design
19. Sheet demonstrating Harmony/Unity in Design
20. Sheet demonstrating Proportion in Design
21. Sheet demonstrating types of Necklines
22. Sheet demonstrating types of Collars
23. Sheet demonstrating types of Pockets
24. Sheet demonstrating types of Sleeves
25. Sheet demonstrating types of Skirts
26. Sheet demonstrating types of Pants

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- 27. Sheet demonstrating types of Tops
  - 28. Sheet demonstrating types of Silhouettes

### **RECOMMENDED BOOKS**

- 1. Tate Sharon Lee, Inside Fashion Design, Pearson (LPE), Edition 5 (2004).
- 2. Ireland Patrick John, Fashion Design Illustration Children, B.T. Batsford Ltd. London, Edition 1 (1995).
- 3. Ireland Patrick John, Encyclopedia of Fashion Details, Om Publications, Edition 1 (2008).
- 4. Ireland Patrick John, Fashion Design Illustration Women, B.T. Batsford Ltd. London, Edition 1 (1997).
- 5. Callan Georgina O'Hara, The Thames & Hudson Dictionary of Fashion and Fashion Designers, Thames & Hudson Publication, Edition 2 (2008).
- 6. Abling Bina, Fashion Sketchbook, The Pepin Press, Edition 1 (2002).

### **SUGGESTED WEBSITES**

- 1. [www.fitnyc.edu/museum/documents/elements-and-principles-of-fashion-design.pdf](http://www.fitnyc.edu/museum/documents/elements-and-principles-of-fashion-design.pdf)
- 2. [www.design.tutsplus.com/articles/10-top-tips-for-fashion-illustration--cms-25881](http://www.design.tutsplus.com/articles/10-top-tips-for-fashion-illustration--cms-25881)
- 3. [www.masterclass.com/articles/elements-of-design-explained#the-elements-of-design](http://www.masterclass.com/articles/elements-of-design-explained#the-elements-of-design)
- 4. [www.canva.com/colors/color-wheel/](http://www.canva.com/colors/color-wheel/)
- 5. [www.londonimageinstitute.com/how-to-empower-yourself-with-color-psychology/](http://www.londonimageinstitute.com/how-to-empower-yourself-with-color-psychology/)

### **INSTRUCTIONAL STRATEGY**

This is a skill based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in students. This subject contains five units of equal weight age.

## 1.3 FUNDAMENTALS OF PATTERN MAKING

<b>L</b>	<b>P</b>
<b>4</b>	<b>4</b>

### RATIONALE

The students should know various considerations in making of garments, incorporation of standard measurements, scope and importance of drafting and pattern making so that they are able to take measurements, interpret the style of any given design and make the pattern. This subject therefore deals with basics of pattern making and styling of garments.

### COURSE OUTCOMES

**After finishing the course, the student shall be able to:**

- CO1: Clarify the basic terminology of pattern making.
- CO2: Summarize the concept of measurements and pattern making tools.
- CO3: Develop basic blocks from measurement charts and body measurements.
- CO4: Manipulate the patterns using darts.
- CO5: Classify the terminology of various garments and details.

### DETAILED CONTENTS

#### UNIT I

**Pattern Making-** Introduction – Pattern Development & its origin, Pattern developments methods, Flat pattern, Draping, symbols and abbreviations.

**Terminology-** Basic Pattern Set, Templates, Working Pattern, Production Pattern, Design Specification Sheet, Pattern Chart, Grain line, Selvage, Darts, Dart Intake, Trueing and Blending, Plumb Line, Seam Allowance, Ease Allowance, Empire Line, Princess Line, Sloper/ Block, Notch, Muslin, Ease, Prototype, Pattern manipulation or adaptation, Pattern grading.

#### UNIT II

**Measurements-** Taking measurement, standard measurement chart, sizes and measurements.

**Pattern Making tools-** Measuring tools, marking tools, cutting tools, pressing tools.

#### UNIT III

**Pattern Development-** Drafting Basic Bodice (front & Back), Sleeve and Developing Sleeveless Bodice.

**Garment Fit-** Garment fitting, Evaluating fit, Need to fit, Methods of fit.

## UNIT IV

**Dart Manipulation-** Introduction, Slash and spread method,Pivot Method, Adaptation of fullness and Principle of contouring.

## UNIT V

### Classification and Terminology of-

**Pattern Style**-Collar, Sleeve, Neckline, Yokes, Pocket, placket and Style lines.

**Garment Style**- Skirts and Pants.

## PRACTICAL EXERCISES

1. Locating land marks
2. Demonstration of taking measurement directly from body
3. Demonstration of taking measurements from the garments
4. Sheet demonstrating measuring tools
5. Sheet demonstrating marking tools
6. Sheet demonstrating cutting tools
7. Sheet demonstrating pressing tools
8. Drafting Basic Bodice (front & Back)
9. Drafting sleeve block
10. Developing Sleeveless Bodice
11. Sheet demonstrating classification of darts
12. Sheet demonstrating dart terminology
13. Sheet demonstrating classification of collar
14. Sheet demonstrating collar terminology
15. Sheet demonstrating classification of sleeve
16. Sheet demonstrating sleeve terminology
17. Sheet demonstrating classification of neckline
18. Sheet demonstrating neckline terminology
19. Sheet demonstrating classification of yoke
20. Sheet demonstrating classification of pocket
21. Sheet demonstrating classification of placket
22. Sheet demonstrating various style lines
23. Sheet demonstrating skirt terminology
24. Sheet demonstrating classification of skirt

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- 25. Sheet demonstrating Pant terminology
  - 26. Sheet demonstrating classification of pant

### **RECOMMENDED BOOKS**

- 1. Armstrong- Joseph Helen, Patternmaking for Fashion Design, Pearson (LPE), Edition 5 (2009).
- 2. Kopp Ernestine, Designing Apparel through the Flat Pattern, Fairchild Publications, Edition 6 (1991).
- 3. Cooklin Gerry, Pattern Grading for Women's Clothes, Blackwell Publishing, Edition 1 (2009).
- 4. Campbell Hilary, Designing Patterns, Stanley Thornes Publishers Ltd, Edition 1 (1988).
- 5. Cooklin Gerry, Pattern Cutting For Women's Outerwear, Blackwell Publishing, Edition 1 (2008).
- 6. Bray Natalie, More Dress Pattern Designing, Fairchild Publications, Edition 4 (2003).
- 7. Abing Bina, Integrating Draping, Drafting and Drawing, Fairchild Publications, Edition 2 (2019).

### **SUGGESTED WEBSITES**

- 1. [www.usha.com/sites/default/files/sewing\\_tutorials/indian-garment-design-course-book.pdf](http://www.usha.com/sites/default/files/sewing_tutorials/indian-garment-design-course-book.pdf)
- 2. [www.textileblog.com/pattern-making-process-in-garment-industry/](http://www.textileblog.com/pattern-making-process-in-garment-industry/)
- 3. [www.techpacker.com/blog/design/apparel-pattern-making/](http://www.techpacker.com/blog/design/apparel-pattern-making/)

### **INSTRUCTIONAL STRATEGY**

This is a skill based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in students. This subject contains five units of equal weight age.

## 1.4 GARMENT WORKSHOP

<b>L</b>	<b>P</b>
-	<b>6</b>

### RATIONALE

The students are supposed to fabricate various components of garments such as pleats and gather, darts, tucks etc., as per measurements and go for mass production of all ages and size. This subject will develop such competencies and deals with basics of garment construction technology.

### COURSE OUTCOMES

After undergoing the subject, students will be able to:

- CO1: Identify the various parts and their functions in a sewing machine.
- CO2: Recognize various problems and solutions of sewing machine.
- CO3: Distinguish various stitches and seams classifications.
- CO4: Operate and control sewing machine for garment construction.
- CO5: Attach various fasteners to the garment.

### PRACTICAL EXERCISES

#### UNIT 1

##### Sewing Machine & Practice

Lockstitch machine and its types, parts of sewing machine, sewing machine attachments, Sewing Aids, safety rules and sewing machine practice.

#### UNIT II

##### Common Machine Problems

Bobbin problem, Fabric problem, Motor problem, Needle problem, Stitch problem.  
Classification of needles and threads

#### UNIT III

##### Stitches (Basic Hand Stitches)

Introduction to stitches, types of Stitches (Temporary & Permanent) – Basting, Hemming, running stitch etc. with their end use.

## UNIT IV

### **Seams (Basic Machine Seams)**

Introduction to seams, types of seams- Plain seam, French seam, flat fell, lapped seam, fabric manipulation seams- gather, pleats and tucks and darts.

## UNIT V

### **Fasteners Attachment**

Attaching various fasteners- hooks, snaps, loops, button, Velcro, zipper

### **Pocket Attachment**

Attaching various types of pockets

## **RECOMMENDED BOOKS**

1. Reader's Digest, Complete Guide to sewing, Pitman Publishing Corporation, New York.
2. Gioello Debbie Ann, Fashion Production Terms, Fairchild Publications, Edition 2 (1999).
3. Gardiner Wendy, Sewing Techniques, Running Press, Edition 2 (2017).
4. Alison Smith, The Sewing Book, DK Publication, Edition 1 (2018).
5. Nancy Langdon, Singer: The Complete Photo Guide to Sewing, Quarry Books, Edition 3 (2017).

## **SUGGESTED WEBSITE**

1. [www.usha.com/sites/default/files/sewing\\_tutorials/indian-garment-design-course-book.pdf](http://www.usha.com/sites/default/files/sewing_tutorials/indian-garment-design-course-book.pdf)
2. [www.thesprucecrafts.com/learn-stitches-and-hand-sewing-projects-2978472](http://www.thesprucecrafts.com/learn-stitches-and-hand-sewing-projects-2978472)

## **INSTRUCTIONAL STRATEGY**

This is hands on practice based workshop and topics taught in the class should be practiced in the lab regularly for development of required skills in the students. This workshop contains five units of equal weightage.

## 1.5 FUNDAMENTALS OF IT

<b>L</b>	<b>P</b>
2	4

### **RATIONALE**

Information technology has great influence on all aspects of life. Almost all work places and living environment are being computerized. In order to prepare diploma holders to work in these environments, it is essential that they are exposed to various aspects of information technology such as understanding the concepts of information technology and its scope, operating a computer: use of various office management tools, using internet and mobile applications etc. This course is intended to make new students comfortable with computing environment- Learning basic computer skills, learning basic application software tools, Understanding Computer Hardware and Cyber security awareness.

### **COURSE OUTCOMES**

At the end of the course student will be able to

- Understand the basic components of Computers, Internet and issues of abuses/ attacks on information and computers.
- Use comfortably Computer, Laptop, Mobiles, Internet Utilities and Install / Configure OS.
- Assemble a PC and connect it to external devices.
- Work with Office Practiced Automation Tools.
- Create worksheets and Prepare presentations.

### **DETAILED CONTENTS**

#### **UNIT 1**

##### **Basics of Computer**

Brief history of development of computers, Definition of Computer, Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting, Interaction between the CPU and Memory with Input/Output devices, Function of CPU and major functional parts of CPU.

Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, Use of storage devices in a Computer, List types of memory used in a Computer, Importance of cache memory, CPU speed and CPU word length

**UNIT 2****Basic Internet Skills**

Understanding browser, Introduction to WWW, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals. Advantages of Email, Various email service providers, Creation of email id, sending and receiving emails, attaching documents with email and drive.

Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets, Online mode of communication using Google Meet & WebEx.

**Unit 3****Basic Logic building**

Introduction to Programming, Steps involved in problem solving, Definition of Algorithm, Definition of Flowchart, Steps involved in algorithm development, differentiate algorithm and flowchart, symbols used in flowcharts, algorithms for simple problems, flowcharts for simple problems, Practice logic building using flowchart/algorithms

**Unit 4****Office Tools**

Office Tools like LibreOffice/OpenOffice/MSOffice.

OpenOffice Writer – Typesetting Text and Basic Formatting, Inserting Images, Hyperlinks, Bookmarks, Tables and Table Properties in Writer.

Introducing LibreOffice/OpenOffice *Calc*, Working .with Cells, Sheets, data, tables, using formulae and functions, using charts and graphics.

OpenOffice Impress – Creating and Viewing Presentations, Inserting Pictures and Tables, Slide Master and Slide Design, Custom Animation.

**Unit 5****Use of Social Media**

Introduction to Digital Marketing – Why Digital Marketing, Characteristics of Digital Marketing, Tools for Digital Marketing, , Effective use of Social Media like LinkedIn, Google+, Facebook, Twitter, etc.: Features of Social media, Advantages and Disadvantages of Social Media.

**PRACTICAL EXERCISES**

This Lab course is intended to practice whatever is taught in theory class of ‘Fundamentals of Information Technology’ and become proficient in using computing environment-basic

computer skills, basic application software tools, Computer Hardware, basic logic building exercise, basic use of emails in daily life etc.

1. Browser features, browsing, using various search engines, writing search queries
2. Visit various e-governance/Digital India portals, understand their features, services offered
3. Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related cables, etc.
4. Using Administrative Tools/Control Panel Settings of Operating Systems
5. Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software.
6. Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times
7. Working with Conversion Software like pdfToWord, WordToPPT, etc.
8. Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications
9. Creating email id, sending and receiving mails with attachments.
10. Using Google drive, Google calendar
11. Create Flow chart and Algorithm for the following
  - i. Addition of n numbers and display result
  - ii. To convert temperature from Celsius to Fahrenheit
  - iii. To find Area and Perimeter of Square
  - iv. Swap Two Numbers
  - v. find the smallest of two numbers
  - vi. Find whether given number is Even or Odd
  - vii. To print first n even Numbers
  - viii. find sum of series  $1+2+3+\dots+N$
  - ix. print multiplication Table of a number
  - x. generate first n Fibonacci terms  $0,1,1,2,3,5\dots n$  ( $n > 2$ )
  - xi. sum and average of given series of numbers
  - xii. Factorial of number n ( $n!=1\times 2\times 3\dots n$ )
  - xiii. Armstrong Number
  - xiv. Find whether given number is Prime or not

## **RECOMMENDED BOOKS**

1. R.S. Salaria, Computer Fundamentals, Khanna Publishing House
2. Ramesh Bangia, PC Software Made Easy – The PC Course Kit, Khanna Publishing House

3. Online Resources, Linux man pages, Wikipedia
4. Mastering Linux Shell Scripting: A practical guide to Linux command-line, Bash scripting, and Shell programming, by Mokhtar Ebrahim, Andrew Mallett
5. Vikas Gupta (2008), Comdex *Hardware and Networking Course Kit*, DreamTech press, New Delhi, India.
6. Sumitabha Das (2008), *UNIX concepts and applications*, 4<sup>th</sup> Edition, Tata McGraw Hill, New Delhi, India.

## SUGGESTED WEBSITES / SOFTWARES

1. <https://nptel.ac.in/courses/106/106/106106222/> - NPTEL Course on Modern Application Development
2. [https://onlinecourses.swayam2.ac.in/aic19\\_de01/preview](https://onlinecourses.swayam2.ac.in/aic19_de01/preview) -
3. <https://spoken-tutorial.org/> - Tutorials on Introduction to Computers, HTML, LibreOffice Tools, etc.
4. NOTEPAD++
5. <https://tms-outsource.com/blog/posts/web-development-ide/>

## INSTRUCTIONAL STRATEGY

This is hands on practice based workshop and topics taught in the class should be practiced in the lab regularly for development of required skills in the students. This workshop contains five units of equal weight age.

## **SECOND SEMESTER**

## SECOND SEMESTER

2.1	Theory of Fashion	35 – 36
2.2	Textile Science	37 - 39
2.3	History of Fashion	40 - 41
2.4	Crafts of India	42 - 44
2.5	Basic Pattern Making and Garment Construction	45 - 46
2.6	Environmental Studies & Disaster Management	47 - 49

## 2.1 THEORY OF FASHION

<b>L</b>	<b>P</b>
<b>4</b>	-

### RATIONALE

Theory of Fashion is essential for the students in order to develop the understanding regarding fashion, fashion terminologies and movement of fashion. This subject will help students to understand the concept of fashion as a socio-cultural phenomenon. It will focus an insight about International trade in fashion and Regulatory bodies in fashion industry.

### COURSE OUTCOMES

After completion of the subject, the students shall be able to:

- CO1: Understand the fundamental aspects of fashion.
- CO2: Summarize the fashion cycle and fashion theories.
- CO3: Clarify the Principles of fashion and Fashion forecasting.
- CO4: Classify the International trade in fashion and Regulatory bodies.
- CO5: Predict the National and International Fashion Labels.

### DETAILED CONTENTS

#### UNIT I

**Understanding Fashion-** Introduction and definition of fashion, Factors influencing fashion.

**Fashion Terminology-** Style, Trend, Collection, Haute Couture, Pret-a-Porter, Avant Garde, Classic, Fad, Mass Fashion, Hi Fashion, Knock off, Limited Fashion, Accessories, Cohort, Consumer, copyright, Custom made, Boutique, Fashion seasons, Obsolescence, Retailing, Merchandising, Staple, Toile, Ensemble.

#### UNIT II

**Fashion Cycle-** Graph and stages in fashion cycle, Cycles within cycle, Interrupted cycle, Recurring Cycle.

**Theories of Fashion Movement-** Trickle- down, Trickle- Up, Trickle- Across.

**Fashion Consumers-** Consumer Segmentation, Fashion Innovators, Fashion Motivators, Fashion Followers, Fashion Victims.

#### UNIT III

Principles of Fashion, Sources of Inspiration for a Designer, Fashion forecasting, Factors affecting Fashion forecasting and the agencies involved in Fashion Forecasting

**UNIT IV**

**Trade of Fashion-** International trade in fashion, Regulatory bodies in fashion and textile sector- Ministry of Textile, Advisory Board, and Export Promotion Councils.

**Role of Fashion professionals-** Role of Fashion Designers, Fashion Technologists and fashion Merchandisers.

**UNIT V****National and International Fashion Labels**

A brief introduction about designer and product of following national and international Labels – RITU KUMAR, TARUN TAHILIANI, SABYA SACHI, MANISH MALHOTRA, GUCCI, CHANEL, ZARA, H&M, NIKE, ADIDAS, ARMANI, PRADA.

**RECOMMENDED BOOKS**

1. Tate Sharon Lee, Inside Fashion Design, Pearson (LPE), Edition 5 (2004).
2. Ireland Patrick John, Encyclopedia of Fashion Details, Om Publications, Edition 1 (2008).
3. Callan Georgina O'Hara, The Thames & Hudson Dictionary of Fashion and Fashion Designers, Thames & Hudson Publication, Edition 2 (2008).
4. Dickerson Kitty G., Inside the Fashion Business, Pearson (LPE), Edition 7 (2002).
5. Mckelvey Kathryn, Fashion Design Process, Innovation & Practice, Blackwell Publishing, Edition 2 (2011).
6. Frings Gini Stephens, Fashion from concept to consumer, Prentice Hall, Edition 9 (2007).

**RECOMMENDED WEBSITES**

1. [www.voguefashioninstitute.com/the-life-cycle-of-fashion/](http://www.voguefashioninstitute.com/the-life-cycle-of-fashion/)
2. [www.textilevaluechain.in/news-insights/apparel-fashion-retail-news/fashionvaluechain/understanding-the-cycles-of-fashion/](http://www.textilevaluechain.in/news-insights/apparel-fashion-retail-news/fashionvaluechain/understanding-the-cycles-of-fashion/)
3. [www.aepcindia.com/node](http://www.aepcindia.com/node)
4. [www.findopteranks.com/top-10-fashion-designers-in-india/](http://www.findopteranks.com/top-10-fashion-designers-in-india/)
5. [www.thevou.com/fashion/top-fashion-brands/](http://www.thevou.com/fashion/top-fashion-brands/)

**INSTRUCTIONAL STRATEGY**

This is theoretical subject for basic fundamental knowledge and contains five units of equal weight age.

## 2.2 TEXTILE SCIENCE

<b>L</b>	<b>P</b>
<b>4</b>	<b>2</b>

### **RATIONALE**

The textile science is essential to provide a comprehensive insight into the basic fundamental knowledge about fibers, yarns, fabric structure, dying, printing, finishing and relevant properties affecting the ultimate performance and use of fabrics by the consumer. This subject will provide relevant knowledge and skills.

### **COURSE OUTCOMES**

After undergoing the subject, students will be able to:

- CO1: Identify different raw material for textile production.
- CO2: Summarize the concept of spinning and yarn properties.
- CO3: Classify the concept of fabric formation and identify basic weaves.
- CO4: Learn about various textile processing activities.
- CO5: Judge various defects in textile products.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Introduction to Textiles**

**Introduction to textile raw materials** – Fiber, Filament, Yarn, Textile and Garment.

**End use of Textiles** - Clothtech, Sporttech, Geotech, Oekotech, Packtech, Mobiltech, Indutech, Med Tech, Hometech, Buildtech, Medtech and Agrotech.

#### **UNIT II**

##### **Textile Fiber & Yarns**

**Primary Properties of Fiber** – Length to Width Ratio, Tenacity, Flexibility, Cohesiveness and Uniformity **Secondary properties of Fiber** - Fiber morphology (Luster), Elongation and elastic recovery, Resiliency, Moisture regain, Flammability and other thermal reactions, Electrical conductivity, Abrasion resistance.,

**Classification of Fibers based on origin** – Natural & Manmade Fibers Natural Fibers - Cellulosic (Cotton, Flax & Jute), Protein – (Wool and Specialty Woolen Fibers), Silk and Mineral Fiber – Asbestos. Man Made Filament Fibers – Rayon, Polyester and Acetate Fibers  
**Spinning** – Spinning methods, Yarn Properties - yarn twist (S&Z directions and Yarn count).  
**Yarn Types** - Ply Yarn, Cable yarn, double yarn and novelty yarns

### UNIT III

#### Weaving, Knitting & Non-Woven

**Weaving Process**, Loom-Parts of a Basic Loom ,Basic Weaving operation – Shedding, Picking, Beating, Taking in and Letting off , Types of Looms – Handloom, Power loom, rapier and Jacquard loom , Parts of a fabric Warp, Weft, Grain, Bias and Selvedge ,Basic Weaves – Plain Weave, Basket Weave, Rib, Twill, Satin and Sateen.

**Knitting Process**,. Types of Knitting Machines; Circular and Flat Machines. General Knitting Terms- Wales, Courses, Face and Back, Knitting Needles, Cut and Gauge. Knit Stitches- Knit Stitch, Purl Stitch, Miss Stitch and Tuck stitch. Fabrics: Single Jersey, Double Jersey, Interlock, rib. Differences between Woven and Knitted Fabrics.

**Non-Woven Fabrics:** Methods and Materials to Manufacture Non-Woven Fabrics; Bonded Fabrics; Foam Laminated Fabrics; Felt

### UNIT IV

#### Dying & Printing

Dying- Introduction, Stages of Dying.

Printing- Introduction, Methods of printing, Types of Printing

### UNIT V

#### Finishing Processes

**Definition of various finishing processes-** Sizing, Desizing, Scouring, Bleaching, Mercerization, Singeing, Beetling, Tentering, Calandering.

### PRACTICAL EXERCISES

1. Collecting samples of fibers- cotton, wool, silk, jute
2. Collecting samples of Yarn- cotton, wool, silk, jute
3. Collecting samples of Fabric- cotton, wool, silk, jute, Rayon, Nylon, lycra
4. Collecting samples of various technical textiles
5. Microscopic tests for identification of cotton, wool, silk,
6. Microscopic tests for identification of polyester, viscose, nylon and acrylic.

7. Burning tests for identification of cotton, wool, silk,
8. Burning tests for identification of polyester, viscose, nylon and acrylic.
9. Chemical tests for identification of cotton, wool, silk,
10. Chemical tests for identification of polyester, viscose, nylon and acrylic.
11. Calculating English yarn count and its conversion into Tex and Denier.
12. Collecting different woven fabric samples.
13. Collecting different non-woven fabric samples
14. Collecting different knitted fabric samples
15. Preparing different dyeing samples.
16. Preparing different printing samples.
17. Collecting different fabric defect samples.

### **RECOMMENDED BOOKS**

1. Jindal Ajay , Jindal Rakesh, Textile Raw Materials, Abhishek Publication, Edition 1( 2015).
2. Corbman Bernard P., Textile – Fabric to Fabric, Mc-Graw –Hill International, Edition 6 (1985).
3. Barker A.F., Handbook of Textiles, Abhishek Publications, Edition 1 (2015).
4. Sekhri Seema, Textbook of Fabric Science – Fundamentals to Finishing, PHI Learning Private Limited, Edition 3 (2019).
5. Wells Kate, Fabric Dyeing & Printing, Conran Octopus Publication, Edition 2 (2000).
6. Arora Vishu, Textile Chemistry, Abhishek Publications, Edition 2 (2011).
7. Dhamija Jasleen, Handwoven Fabrics of India, Mapin Publishing Pvt. Ltd., Edition 1 (1999).

### **SUGGESTED WEBSITES**

1. [www.ittaindia.org](http://www.ittaindia.org)
2. [www.sewguide.com/fabric-finishes/](http://www.sewguide.com/fabric-finishes/)
3. [www.sewguide.com/what-are-textiles](http://www.sewguide.com/what-are-textiles)
4. [www.barnhardt cotton.net/blog/know-fibers-wovens-vs-nonwovens-knit-fabrics/](http://www.barnhardt cotton.net/blog/know-fibers-wovens-vs-nonwovens-knit-fabrics/)
5. [www.textilevaluechain.in/in-depth-analysis/articles/textile-articles/types-of-dyeing-and-printing-with-their-inovations/](http://www.textilevaluechain.in/in-depth-analysis/articles/textile-articles/types-of-dyeing-and-printing-with-their-inovations/)

### **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the lab regularly for development of required skills in the students. This workshop contains five units of equal weightage.

## 2.3 HISTORY OF FASHION

L	P
3	-

### RATIONALE

The students of fashion design should be able to appreciate ancient civilization, the fashion that existed in the different periods, their contribution in shaping the present and promoting the future trends in the field of fashion. They should also have a basic knowledge of traditional costumes of different regions of India and their impact on today's fashion. This subject will provide historical knowledge of fashion.

### COURSE OUTCOMES

After undergoing the subject, students will be able to:

- CO1: Study fashion history as a source of research for developing new collections.
- CO2: Learn the history of clothing and costume.
- CO3: Classify the role of multiple factors influencing fashion.
- CO4: Clarify appropriate terminology related to fashion history.
- CO5: Summarize the evolution of fashion.

### DETAILED CONTENTS

#### UNIT I

**Introduction-** Factors affecting clothing- Protection, Ritualistic, Adornment, Identification (Social Status, Rank, Profession, and Marital Status).

#### UNIT II

**Origin and Development of Costume-** Draped Costume- Indian, Egyptian, Greek, Roman, Sumerian, Babylonian and Assyrian.

**Terminology-** Angarkha, Antariya, Chintz, Chiton, Fibula, Haik, Himation, Jootis, Kalasaires, Kaunakes, Kavach, Kayabandh, Khakhi, Mauli, Palla, Peplos, Schenti, Toga, Ushnisa, Uttariya.

#### UNIT III

**Effect of World war on fashion-** World War-I(1914-1918), Between the Wars (1919-1939), World War-II (1939-1945)

## UNIT IV

**Traditional Costumes of India-** Types of costumes for male and female (Jammu and Kashmir, Punjab, Rajasthan, UP, Gujarat, West Bengal, Assam, Maharashtra, Tamil Nadu and North East States)

## UNIT V

**Evolution of Modern Indian Fashion-** IndianFashion from 1900`s to till Date, Influence of Films on Fashion

### RECOMMENDED BOOKS

1. Johnston lucy, Nineteenth Century Fashion In Detail, Victoria & Albert Museum Publication, Edition 2 (2006)
2. Brown Susan, Fashion: The Definitive Histort of Costume and Style, DK Publishing, Edition 1 (2012)
3. Racinet Auguste, The Complete Costume History, Taschen Publication, Edition 6 (2018)
4. Bhatnagar Parul, Traditional Indian Costumes & Textiles, Abhishek Publication, Edition 1 (2011)

### SUGGESTED WEBSITES

1. [www.innfinity.in/limitless/29-states-of-india-and-their-dresses-which-are-simply-stunning/](http://www.innfinity.in/limitless/29-states-of-india-and-their-dresses-which-are-simply-stunning/)
2. [www.krishabapna.wordpress.com/2017/09/25/impact-of-world-war-1-on-fashion/](http://www.krishabapna.wordpress.com/2017/09/25/impact-of-world-war-1-on-fashion/)
3. [www.vintage-retro.com/the-impact-of-world-war-ii-on-womens-fashion/](http://www.vintage-retro.com/the-impact-of-world-war-ii-on-womens-fashion/)

### INSTRUCTIONAL STRATEGY

This is theoretical subject for basic fundamental understanding of students and contains five units of equal weight age.

## 2.4 CRAFTS OF INDIA

<b>L</b>	<b>P</b>
-	8

### RATIONALE

The Students of fashion Design require the knowledge about various crafts practiced in all regions of India for polishing their creativity. Crafts of India are diverse, rich in history, culture and religion. The craft of each state in India reflect the influence of different empires. Throughout centuries, crafts have been embedded as a culture and tradition within rural communities.

### COURSE OUTCOMES

After completion of the unit, the student shall be able to

- CO1: Classify the crafts of Northern India.
- CO2: Determine the crafts of Eastern India.
- CO3: Summarize the crafts of Western India.
- CO4: Judge the crafts of Southern India.
- CO5: Differentiate the crafts of Central and Northeastern India.

### PRACTICAL EXERCISES

#### UNIT I

**Crafts of Northern India:** Introduction to the crafts of:

**Jammu & Kashmir** - Walnut wood carving, Paper mache and copperware

**Delhi** - Blue Pottery, Silver paper (varak) and handmade perfumes (ittars).

**Himachal Pradesh**- Metal craft, Miniature Panting, stone carving, Himachali cap, Pullas footwear.

**Punjab**- Jootis (shoes and slippers), Durries (a pile less cotton spread), Parandis

**Uttarakhand** –Wood carving, Paintings and Ornaments.

**Uttar Pradesh** - Stone work, Brassware, Glassware and Pottery.

**Haryana** - Mudah making, zarijutti, Basketry, Pottery and Sanghi craft.

**Rajasthan** - Furniture and wood carving, Pottery, Leather ware, Metal craft, Painting, Puppets and Stone carving.

## UNIT II

**Crafts of Eastern India:** Introduction to the crafts of:

**Bihar** - Madhubani painting, Manjusa art (scroll painting), Patna Kalam (from Patna school of painting), Tikuli art.

**Orissa** - Silver filigree, Horn work, Tribal Jewellery, Brass and Bell metal, Jhoti Chita and Murujarangoli, Pattachitr and Puppets & Masks.

**Jharkhand** - Bamboo craft, Paitkar Painting, Ornaments and Toy making.

**West Bengal**- Dokra metal casting, Soft dolls, Terracota, Horn craft, Conch & Shell carving, Leather craft, Sandalwood carving.

## UNIT III

**Crafts of Western India:** Introduction to the crafts of:

**Gujarat** - White metal meenakari, Sadeli, Warli art, Mud work, Leather work, Rogan Painting, Pithora Painting, Sankheda Furniture.

**Goa** - Crochet & Embroidery, Bamboo Craft, Fiber Craft, Jute Macrame Craft, Coconut Mask Carving and Sea Shell Craft

**Maharashtra** - Bidriware, KolhapuriChappals, Mashroo&Himroo, Narayan Peth.

## UNIT IV

**Crafts of Southern India:** Introduction to the crafts of:

**Andhra Pradesh** - Puppets, saraswathiveena, trinket boxes made of tortoise shell and bone and Red sandalwood carving.

**Telangana** - Bidri craft, Cheriyal scroll painting, Nirmal Painting, Dokra metal craft, Silver filigree, Pearljewellery and Nirmal toys.

**Karnataka** - Sandalwood carving, wood inlay, painted woodware, Natural fiber craft, Mysore painting, Ganjifa cards, Chittra folk painting, Yakshagana costume.

**Kerala** - Wood, ivory and buffalo horn carvings, coconut shell carvings.

**Tamil Nadu** - Palm Leaf work, Shell craft, root carving, silk garland making, Thanjavavur glass painting.

**Andaman Nicobar Islands** - wood craft, shell craft and gems jewelry.

## UNIT V

**Crafts of Central and North Eastern India:** Introduction to the crafts of:

**Madhya Pradesh** - Mandana Arts, Paper mache, Dhokra, Bamboo and basket weaving, Gond painting, Bead Jewelry, Battobai dolls, Pithora painting and marble carving

**Chhattisgarh** - Bamboo art, Dhokra (Bell Metal), Godna, Wrought iron (lohashilp), Ornaments, wall painting and Wood carving.

**Assam** - Cane and bamboo craft, Metal craft, Wood craft, Mask making, Jewelry, Terracota and Traditional Paintings.

**Sikkim** - Papers, Cane & Bamboo craft, Canvas wall hangings, Choksee table and Thankas Delineating paintings.

**Nagaland** - Naga Cloth, Wood carving, Cane and Bamboo, Pottery, Black smithy

**Meghalaya** - Basket weaving, Cane & Bamboo craft, Winnowing trays and Fans.

**Manipur** - Manipuri dance doll, Cane and bamboo work, Wood carving.

**Mizoram** - Bamboo and cane product, Basketry, Weaving and Shawls

**Tripura** - Bamboo and cane product and Handlooms.

**Arunachal Pradesh** - Bamboo and cane product, weaving, Wood carving, Carpet and Ornaments.

## RECOMMENDED BOOKS

1. Development Commissioner ( Handicraft) Ministry of Textile (Govt. Of India),
2. A Compendium of Geographical Indication (GI) Handicrafts of India, Ministry of Textile (Govt. Of India), 2019 Edition.

## SUGGESTED WEBSITES

[www.handicrafts.nic.in/pdf/LIST\\_OF\\_CRAFT\\_REGISTERED\\_UNDER\\_GEOGRAPHICAL\\_INDICATION\\_HANDICRAFTSNew.pdf](http://www.handicrafts.nic.in/pdf/LIST_OF_CRAFT_REGISTERED_UNDER_GEOGRAPHICAL_INDICATION_HANDICRAFTSNew.pdf)

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject for development of required skills in the students. This subject contains five units of equal weightage. Students have to give presentation on anyone of the North, East, West, South, Central or North East Indian Crafts. Teachers are recommended to take students for field trip to Surajkund Mela and National Art & Craft Museum etc.

## 2.5 BASIC PATTERN MAKING AND GARMENT CONSTRUCTION

<b>L</b>	<b>P</b>
-	8

### RATIONALE

The knowledge and skills related to Basic Pattern Making and Garment Construction will enable students to convert their designs in to garment by drafting and developing basic patterns, stitching them into complete garments and give them a finishing touch, from scratch with the developed technical skills.

### COURSE OUTCOMES

After undergoing the subject, students will be able to:

- CO1: Develop different types of plackets.
- CO2: Design necklines and attach collars.
- CO3: Construct sleeves and attach cuffs.
- CO4: Sketch draft and stitch basic skirt
- CO5: Create draft and stitch basic top

### PRACTICAL EXERCISES

#### UNIT I

Continuous Placket

Simple Shirt Placket

Shirt Placket with facing

#### UNIT II

Neckline finishing – Bias Strip (preparation and neckline finishing with bias binding), Bias Facing, Shaped facing.

Collar attachment

#### UNIT III

Drafting, cutting, stitching of Sleeve, attaching cuffs and finishing

## UNIT IV

Fabric selection, Drafting, pattern cutting, marker planning/ layout, fabric estimation, cutting, stitching and finishing of basic skirt.

## UNIT V

Design selection, Fabric selection, Drafting, pattern cutting, marker planning/ layout, fabric estimation, cutting, stitching and finishing of basic Top/ T- Shirt

### RECOMMENDED BOOKS

1. Armstrong- Joseph Helen, Patternmaking for Fashion Design, Pearson (LPE), Edition 5 (2009).
2. Kopp Ernestine, Designing Apparel through the Flat Pattern, Fairchild Publications, Edition 6 (1991).
3. Cooklin Gerry, Pattern Grading for Women's Clothes, Blackwell Publishing, Edition 1 (2009).
4. Campbell Hilary, Designing Patterns, Stanley Thornes Publishers Ltd, Edition 1 (1988).
5. Cooklin Gerry, Pattern Cutting For Women's Outerwear, Blackwell Publishing, Edition 1 (2008).
6. Bray Natalie, More Dress Pattern Designing, Fairchild Publications, Edition 4 (2003).
7. Abling Bina, Integrating Draping, Drafting and Drawing, Fairchild Publications, Edition 2 (2019).

### SUGGESTED WEBSITES

1. [www.usha.com/sites/default/files/sewing\\_tutorials/indian-garment-design-course-book.pdf](http://www.usha.com/sites/default/files/sewing_tutorials/indian-garment-design-course-book.pdf)
2. [www.sewguide.com/a-basic-skirt-pattern/](http://www.sewguide.com/a-basic-skirt-pattern/)

### INSTRUCTIONAL STRATEGY

This is hands on practice based subject for development of required skills in the students. This subject contains five units of equal weight age.

## **2.6 ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT**

L	P
2	-

### **RATIONALE**

A diploma holder must have knowledge of different types of pollution caused due to industrial and construction activities so that he/she may help in balancing the ecosystem and controlling pollution by various control measures. The course is intended to provide a general concept in the dimensions of environmental pollution and disasters caused by nature beyond the human control as well as the disasters and environmental hazards induced by human activities with emphasis on disaster preparedness, response and recovery.

### **COURSE OUTCOMES**

After undergoing the subject, the student will be able to:

- CO1: Comprehend the importance of sustainable ecosystem.
- CO2: Clarify interdisciplinary nature of environmental issues.
- CO3: Describe corrective measures for the abatement of pollution.
- CO4: Identify the role of non-conventional energy resources in environmental protection.
- CO5: Recognize various types of disasters.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Introduction**

- 1.1 Basics of ecology, eco system- concept, and sustainable development, Sources, advantages, disadvantages of renewable and nonrenewable energy.
- 1.2 Rain water harvesting
- 1.3 Deforestation – its effects & control measures

#### **UNIT II**

##### **Air and Noise Pollution**

- 2.1 Air Pollution: Source of air pollution. Effect of air pollution on human health, economy, Air pollution control methods.

2.2 Noise Pollution: Source of noise pollution, Unit of noise, Effect of noise pollution, Acceptable noise level, Different method of minimizing noise pollution.

## **UNIT III**

### **Water and Soil Pollution**

- 3.1 Water Pollution: Impurities in water, Cause of water pollution, Source of water pollution. Effect of water pollution on human health, Concept of DO, BOD, COD. Prevention of water pollution- Water treatment processes, Sewage treatment. Water quality standard.
- 3.2 Soil Pollution :Sources of soil pollution, Effects and Control of soil pollution, Types of Solid waste- House hold, Industrial, Agricultural, Biomedical, Disposal of solid waste, Solid waste management E-waste, E – waste management

## **UNIT IV**

### **Impact of Energy Usage on Environment**

Global Warming, Green House Effect, Depletion of Ozone Layer, Acid Rain. Eco-friendly Material, Recycling of Material, Concept of Green Buildings, Concept of Carbon Credit & Carbon footprint.

## **UNIT V**

### **Disaster Management**

#### **A. Different Types of Disaster:**

Natural Disaster: such as Flood, Cyclone, Earthquakes and Landslides etc.

Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster, Biological Disasters, Accidents (Air, Sea Rail & Road), Structural failures(Building and Bridge), War & Terrorism etc.

#### **B. Disaster Preparedness:**

Disaster Preparedness Plan

Prediction, Early Warnings and Safety Measures of Disaster

Psychological response and Management (Trauma, Stress, Rumour and Panic)

## **RECOMMENDED BOOKS**

1. Environmental Studies by S.C. Sharma & M.P. Poonia, Khanna Publishing House, New Delhi
2. Environmental and Pollution Awareness by Sharma BR; Satya Prakashan, New Delhi.
3. Environmental Pollution by Dr. RK Khitoliya; S Chand Publishing, New Delhi
4. Environmental Studies by Erach Bharucha; University Press (India) Private Ltd., Hyderabad.

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5. Environmental Engineering and Management by Suresh K Dhamija; S K KatariaandSons, New Delhi.
  6. E-books/e-tools/relevant software to be used as recommended by AICTE/BTE/NITTTR, Chandigarh.
  7. Disaster Management by Dr. Mrinalini Pandey, Wiley India Pvt. Ltd.
  8. Disaster Science and Management by Tushar Bhattacharya, McGraw Hill Education (India) Pvt. Ltd.

## **INSTRUCTIONAL STRATEGY**

In addition to theoretical instructions, different activities pertaining to Environmental Studies and Disaster Management like expert lectures, seminars, visits etc. may also be organized This subject contains five units of equal weightage.

# **SECOND YEAR**

## **NSQF LEVEL - 4**

## 12. STUDY AND EVALUATION SCHEME

### THIRD SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits L+P= C	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT								
		L	P		Th	Pr	Total	Th	Pr	Total			
3.1	Industrial/In-House Training - I	-	2	0+1=1	-	40	40	-	60	60	100		
3.2	Traditional Indian Textiles	3	2	3+1 =4	40	40	80	60	60	120	200		
3.3	Fashion Retailing	4	-	4+0 =4	40	-	40	60	-	60	100		
3.4	Design to Dispatch	3	-	3+0 =3	40	-	40	60	-	60	100		
3.5	Pattern Making and Garment Construction	-	8	0+4=4	-	40	40	-	60	60	100		
3.6	CAD in Fashion Design - I	-	8	0+4=4	-	40	40	-	60	60	100		
	# SCA	-	5	-	-	-	-	-	-	-	-		
<b>Total</b>		<b>10</b>	<b>25</b>	<b>20</b>	<b>120</b>	<b>160</b>	<b>280</b>	<b>180</b>	<b>240</b>	<b>420</b>	<b>700</b>		

- # Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Electoral Literacy, Motor Vehicles (Driving) Regulations 2017 etc., games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self-study etc.

**FOURTH SEMESTER**

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) $L + P = C$	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT								
		L	P		Th	Pr	Total	Th	Pr	Total			
4.1	*English and Communication Skills - II	2	2	2+1=3	40	40	80	60	60	120	200		
4.2	Apparel Management and Quality Control	4	-	4+0=4	40	-	40	60	-	60	100		
4.3	Accessory Designing	2	4	2+2=4	40	40	80	60	60	120	200		
4.4	CAD in Fashion Design –II	-	6	0+3=3	-	40	40	-	60	60	100		
4.5	Open Elective (MOOCs+/Offline)	2	-	2+0=2	40	-	40	60	-	60	100		
4.6	Minor Project	-	8	0+4=4	-	40	40	-	60	60	100		
# Student Centered Activities (SCA)		-	5	-	-	-	-	-	-	-	-		
Total		<b>10</b>	<b>25</b>	<b>20</b>	<b>160</b>	<b>160</b>	<b>320</b>	<b>240</b>	<b>240</b>	<b>480</b>	<b>800</b>		

\* Common with other Diploma Courses.

+ Assessment of Open Elective through MOOCs shall be based on assignments out of 100 marks.

# Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Electoral Literacy, Motor Vehicles (Driving) Regulations 2017 etc., games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self-study etc.

**Industrial Training:** After 4<sup>th</sup> Semester, students shall undergo Industrial Training of 4 Weeks.

### **13. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION**

<b>Sr. No.</b>	<b>Subjects/Areas</b>	<b>Hours Per Week</b>	
		<b>Third Semester</b>	<b>Fourth Semester</b>
1.	Industrial/In-House Training - I	2	-
2.	Traditional Indian Textiles	5	-
3.	Fashion Retailing	4	-
4.	Design to Dispatch	3	-
5.	Pattern Making and Garment Construction	8	-
6.	CAD in Fashion Design - I	8	
7.	English and Communication Skills - II	-	4
8.	Apparel Management and Quality Control	-	4
9.	Accessory Designing	-	6
10.	CAD in Fashion Design –II	-	6
11.	Open Elective (MOOCs/Offline)	-	2
12.	Minor Project	-	8
13.	Student Centered Activities	5	5
<b>Total</b>		<b>35</b>	<b>35</b>

## 14. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

Government and private sectors related to **Fashion Design** require **skilled manpower** to work in familiar, predictable, routine situations of clear choice. They are expected to have factual knowledge of fashion design field. They are expected to communicate with required clarity. Students after completing level 4 shall have knowledge of basic arithmetic, algebraic principles and basic understanding of social and natural environment. They are expected to recall and demonstrate skills in narrow range of applications using appropriate rules and tools to maintain quality.

Skilled workers will be responsible for carrying out a range of jobs, some of which will require them to make choices about the approaches they adopt. They will be expected to learn and improve their practice on the job. They should know what constitutes quality in the occupation and should distinguish between good and bad quality in the context of their job roles. Skilled worker at this level will be expected to carry out their work safely and securely and take full account of the health and safety on colleagues and customers. They should work hygienically and in ways which show an understanding of environmental issues. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social and political environment.

Fashion Design students after completing NSQF Level – 4 are expected to have good theoretical knowledge of Fashion Retailing, Design to Dispatch, Apparel Management and Quality Control. They are also expected to have good hands on practice in Pattern Making, Garment Construction, and Accessory Designing. Students should be able to demonstrate Computer Aided Design skills related to fashion design. At this level, students should also have theoretical and practical knowledge of Traditional Indian Textiles. They are also expected to handle small projects related to fashion design industries at this level.

21Fashion Design students have wide scope to work as skilled employee in export houses, import houses, 5domestic industries, freelancer in different activities related to fashion designing, fashion merchandising in marketing, production and quality control units in garment manufacturing industries. They can start their own small startup in the area of marketing, sales, manufacturing and production etc.

## 15. PROGRAMME OUTCOMES

The programme outcomes are derived from five domains of NSQF Level – 4 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this level, the student will be able to:

**PO1:** Work in familiar, predictable, routine situation of clear choice.

**PO2:** Acquire factual knowledge in the field of fashion design for employment.

**PO3:** Demonstrate routine and repetitive skills in narrow range of applications using appropriate rules and tools for quality.

**PO4:** Communicate with required clarity along with social and natural environment understanding.

**PO5:** Perform tasks with responsibility for own work and learning.

**PO6:** Select open elective of own interest to develop self-learning habit through online courses.

## 16. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

<b>Programme Outcomes to be assessed</b>	<b>Assessment criteria for the Course Outcomes</b>
<b>PO1:</b> Work in familiar, predictable, routine situation of clear choice.	<ul style="list-style-type: none"> <li>• Classify the regional embroideries of India.</li> <li>• Differentiate various regional Printed textiles of India.</li> <li>• Describe various regional woven textiles of India.</li> <li>• Acquire the knowledge and stitch the variation of Skirt.</li> <li>• Learn and draft the variation of T-shirt/ Top.</li> <li>• Explain and stitch the variation of one piece dress/ Tunic.</li> <li>• Study and draft the variation of Shorts.</li> <li>• Describe and stitch variation of Ladies Shirt.</li> <li>• Create the designs with the help of relevant software.</li> <li>• Handle CorelDraw designing tools..</li> <li>• Develop the skills to use Photoshop designing tools.</li> <li>• Design and visualize fashion and clothing using computer.</li> <li>• Create Design of various accessories.</li> </ul>
<b>PO2:</b> Acquire factual knowledge in the field of fashion design for employment.	<ul style="list-style-type: none"> <li>• Explain various regional dyed textiles of India.</li> <li>• Learn the cultural heritage of India.</li> <li>• Understand retail business.</li> <li>• Learn various retail formats.</li> <li>• Study Consumer Behavior.</li> <li>• Identify the scope of Fashion retail industry.</li> <li>• Describe the details of retail market.</li> <li>• Learn the pre-production activities in garment industry.</li> <li>• Study the post-production activities in garment industry.</li> <li>• Explain the cutting and maker planning activities.</li> <li>• Describe the sewing and assembly department in apparel production.</li> </ul>

	<ul style="list-style-type: none"> <li>• Acquire knowledge about the importance of finishing and packing activities in apparel manufacturing.</li> <li>• Explore the potential effects of current technological developments in the fashion industry.</li> <li>• Study Basic Production Terms.</li> <li>• Learn various Production Processes.</li> <li>• Acquire knowledge about Material Handling.</li> <li>• Describe Quality Control.</li> <li>• Explain Garment inspection system.</li> <li>• Study the type of Footwear.</li> <li>• Learn the type of Handbags.</li> <li>• Acquire Knowledge about the type of Belt &amp; Glove.</li> <li>• Describe the type of Jewelry.</li> </ul>
<b>PO3:</b> Demonstrate routine and repetitive skills in narrow range of applications using appropriate rules and tools for quality.	<ul style="list-style-type: none"> <li>• Classify the regional embroideries of India.</li> <li>• Differentiate various regional Printed textiles of India.</li> <li>• Describe various regional woven textiles of India.</li> <li>• Acquire the knowledge and stitch the variation of Skirt.</li> <li>• Learn and draft the variation of T-shirt/ Top.</li> <li>• Explain and stitch the variation of one piece dress/ Tunic.</li> <li>• Study and draft the variation of Shorts.</li> <li>• Describe and stitch variation of Ladies Shirt.</li> <li>• Create the designs with the help of relevant software.</li> <li>• Handle CorelDraw designing tools..</li> <li>• Develop the skills to use Photoshop designing tools.</li> <li>• Design and visualize fashion and clothing using computer.</li> <li>• Create Design of various accessories.</li> </ul>
<b>PO4:</b> Communicate with required clarity along with social and natural environment understanding.	<ul style="list-style-type: none"> <li>• Develop required competencies for effective communication and presentation.</li> <li>• Communicate effectively with an increased</li> </ul>

	<p>confidence; read, write and speak in English language fluently.</p> <ul style="list-style-type: none"> <li>• Comprehend special features of format and style of formal communication through various modes.</li> <li>• Write a Report, Resume, make a Presentation, Participate in GDs and Face Interviews.</li> <li>• Illustrate use of communication to build a positive self-image through self-expression and develop more productive interpersonal relationships.</li> <li>• Write the minor project report effectively.</li> <li>• Present the minor project report using PPT.</li> </ul>
<b>PO5:</b> Perform tasks with responsibility for own work and learning.	<ul style="list-style-type: none"> <li>• Understand the working environment of industries.</li> <li>• Take necessary safety precautions and measures.</li> <li>• Learn about present and future requirement of industries.</li> <li>• Work in team for solving industrial problems</li> <li>• Develop required competencies and skills for relevant industries.</li> <li>• Select the minor project according to the need of relevant industries.</li> <li>• Work as a team member for successful completion of minor project.</li> <li>• Acquire Life Long Learning skills.</li> </ul>
<b>PO6:</b> Select open elective of own interest to develop self-learning habit through online courses.	<ul style="list-style-type: none"> <li>• State the basic concepts and principles about the subject of interest.</li> <li>• Perform in a better way in the professional world.</li> <li>• Select and learn the subject related to own interest.</li> <li>• Explore latest developments in the field of interest.</li> <li>• Develop the habit of self-learning through online courses.</li> </ul>

## **17. SUBJECTS & CONTENTS (SECOND YEAR)**

## THIRD SEMESTER

3.1	Industrial/In-House Training - I	58 - 59
3.2	Traditional Indian Textiles	60 - 62
3.3	Fashion Retailing	63 - 64
3.4	Design to Dispatch	65 - 67
3.5	Pattern Making and Garment Construction	68 - 69
3.6	CAD in Fashion Design - I	70 - 71

### **3.1 INDUSTRIAL/IN-HOUSE TRAINING - I**

<b>L</b>	<b>P</b>
-	2

#### **RATIONALE**

Industrial training / In – house training will help the students to understand the working environment of relevant industries. The student will learn to work in team to solve the industrial problems. It will also give exposure about the present and future requirements of the relevant industries. This training is very important for development of required competencies and skills for employment and start-ups.

#### **COURSE OUTCOMES**

After undergoing the training, the students will be able to:

- CO1: Understand the working environment of industries
- CO2: Take necessary safety precautions and measures.
- CO3: Learn about present and future requirement of industries.
- CO4: Work in team for solving industrial problems
- CO5: Develop competencies and skills required by relevant industries.
- CO6: Develop writing, speaking and presentations skills.

#### **PRACTICAL EXERCISES**

1. Report writing based on industrial training.
2. Preparation of Power Point Slides based on industrial training and presentation by the candidate.
3. Internal Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.
4. External Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.

#### **GUIDELINES**

Students will be evaluated based on Industrial training / In – house training report and their presentation using Power Point about the knowledge and skills gained during the training. The

Head of the Department will depute faculty coordinators by assigning a group of students to each. The coordinators will mentor and guide the students in preparing the PPTs for final presentation. The following performance parameters are to be considered for assessment of the students out of 100 marks:

	<b>Parameter</b>	<b>Weightage</b>
i	Industrial / In-house assessment of the candidate by the trainer	40%
ii	Report Writing	20%
iii	Power Point Presentation	20%
iv	Viva-voce	20%

### **3.2. TRADITIONAL INDIAN TEXTILES**

<b>L</b>	<b>P</b>
<b>3</b>	<b>2</b>

#### **RATIONALE**

The students of fashion design at this level should know about the traditional Indian embroidered, printed, dyed and woven textile materials. They are also expected to acquire relevant skills in embroidery techniques of different types of traditional Indian embroideries and textiles. The subject aims at developing the skills in various types of stitches and traditional embroidery.

#### **COURSE OUTCOMES**

After undergoing this subject, the students will be able to:

- CO1: Classify the regional embroideries of India.
- CO2: Explain various regional dyed textiles of India.
- CO3: Differentiate various regional Printed textiles of India.
- CO4: Describe various regional woven textiles of India.
- CO5: Learn the cultural heritage of India.

#### **DETAILED CONTENTS**

##### **UNIT I**

###### **Embroidered Textiles of India**

Kashida, Phulkari, Chamba Rumal, Chikankari, Kasuti, Zardozi, Kantha, Applique work, Kutch embroidery.

##### **UNIT II**

###### **Dyed Textiles of India**

**Resist Dyed-** Bandhani Of Gujrat, Bandhej and Leheria of Rajasthan, Batik.

**Ikat-** Patola of Gujrat, Bandhas of Odisha, Telia Rumal and Pochampalli of Andhra Pradesh

##### **UNIT III**

###### **Printed Textiles of India**

Bagru Prints of Rajasthan, Sanganer Prints of Rajasthan, Kalamkari of Andhra Pradesh.

**UNIT IV****Hand- Woven Sarees of India**

Banarsi, Baluchari, Jamdani, Paithani, Kanjeevaram, Chanderi, Maheshwari

**UNIT V****Hand- Woven Shawl & Floor Coverings**

**Shawla-** Kashmiri Shawls(Kani, Pashmina, Shah Tush, Raffal), Kullu & Kinnaur Shawls, Wraps of North- East

**Floor Coverings-** Carpets, Namdas, Durries and Rugs

**PRACTICAL EXERCISES**

1. Preparation of sample of Kashida embroidery (6``x6``)
2. Preparation of sample of Phulkari embroidery(6``x6``)
3. Preparation of sample of Chamba Rumal embroidery(6``x6``)
4. Preparation of sample of Chikankari embroidery(6``x6``)
5. Preparation of sample of Kasuti embroidery(6``x6``)
6. Preparation of sample of Zardozi embroidery(6``x6``)
7. Preparation of sample of Kantha embroidery(6``x6``)
8. Preparation of sample of Applique work embroidery(6``x6``)
9. Preparation of sample of Kutch embroidery(6``x6``)
10. Preparation of sample of Tie and Dye(6``x6``)
11. Preparation of sample of Block Printing(6``x6``)
12. Preparation of sample of Batik(6``x6``)
13. Present a project on Embroidered Textiles of India
14. Present a project on Dyed Textiles of India
15. Present a project on Printed Textiles of India
16. Present a project on Woven Sarees of India

**RECOMMENDED BOOKS**

1. Embroidered Textiles; Traditional Pattern Form Five Continents by Paine published by M/S Haper & Row, New York
2. Traditional Embroideries of India by Shailja D. Naik published by M/S APHP Publishing Book Centre, New Delhi
3. Traditional Indian Embroideries by Samrity Pandit published by M/S APHP Publishing B

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- ookCentre, New Delhi
4. Traditional Textiles of India by Kamaldevi Chatopadhyay published by M/SAPHPublishing Book Centre, New Delhi

## **RECOMMENDED WEBSITES**

1. [www.craftsvilla.com/blog/famous-indian-embroidery-styles/](http://www.craftsvilla.com/blog/famous-indian-embroidery-styles/)
2. [www.indianculture.gov.in/textiles-and-fabrics-of-india/type-of-textile/dyeing/](http://www.indianculture.gov.in/textiles-and-fabrics-of-india/type-of-textile/dyeing/)
3. [www.saree.com/10-printing-and-dyeing-techniques-from-india](http://www.saree.com/10-printing-and-dyeing-techniques-from-india)
4. <http://swayam.gov.in>

## **INSTRUCTIONAL STRATEGY**

This is a skill based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weight age.

### 4.3.FASHION RETAILING

L P  
4 -

#### RATIONALE

The subject will help the students to understand about retailing, retail terminology, various types of retail formats and retailing functions along with consumer behavior. Student will be able to understand various factors involved in successful visual merchandising and advertising. It will further familiarize the students with organized retailing and its value.

#### COURSE OUTCOMES

After undergoing the subject, students will be able to:

- CO1: Understand retail business.
- CO2: Learn various retail formats.
- CO3: Study Consumer Behavior.
- CO4: Identify the scope of Fashion retail industry.
- CO5: Describe the details of retail market.

#### DETAILED CONTENTS

##### UNIT I

**Retailing-** Overview, Evolution of retail, functions of retailer, Retail market channel, Classification of Retailing formats- Owner based retailing, Merchandise based retailing, Non store or Direct retailing, Service based retailing, Retail versus Wholesale.

##### UNIT II

**Retail Terminology-** Cost price, Selling Price, Profit, Consumerism, Consumption, Customer satisfaction, Distribution, Empowered Consumer, Inventory shrinkage, Logistic, Markdown, Mark ups, Procurement, Supply chain Management, Wholesale, Broker, Vendor.

##### UNIT III

**Introduction to Retail Organizations-** Department store, Discount store, Specialty store, Chain store, Super market, Hyper market, warehouse retailing, Party plan, Destination store, Direct retailing, E-retailing.

## UNIT IV

**Understanding Retail Consumer-** Consumer versus Customer, Identifying a customer, Customer's buying behavior pattern, Factor influencing retail consumer, consumer's decision making process.

## UNIT V

**Retail Marketing-** Visual Merchandising, Retail Advertising, Sales Promotion(POP, POS, Promotional price, Loyalty Program), Customer relationship management, Elements of Retail marketing mix (Product, Promotion, Place, Price, Process, People, Physical environment), Retail communication.

## RECOMMENDED BOOKS

1. Fashion from Concept to Consumer published by M/S Perl Books, London
2. Fashion Retail Merchandising published by M/S Fairchild Books, New York
3. Inside the Fashion Business by Joonow, Jeap published by M/S Startan video, USA
4. Fashion Merchandising by Stone Ela published by McGraw Hill Book Company, New Delhi
5. Ready to Wear Apparel Analysis by Petty and Brown published by M/S Perl Books, London

## RECOMMENDED WEBSITES

1. [www.businessjargons.com/retailing.html](http://www.businessjargons.com/retailing.html)
2. [www.tutorialspoint.com/retail\\_management/retail\\_management Tutorial.pdf](http://www.tutorialspoint.com/retail_management/retail_management Tutorial.pdf)
3. [www.sim.edu.in/wp-content/uploads/2018/02/RETAIL-MANAGEMENT-Notes.pdf](http://www.sim.edu.in/wp-content/uploads/2018/02/RETAIL-MANAGEMENT-Notes.pdf)
4. <http://swayam.gov.in>

## INSTRUCTIONAL STRATEGY

This is theoretical subject and contains five units of equal weightage.

### 3.4 DESIGN TO DISPATCH

L P  
3 -

#### RATIONALE

The knowledge and skills of Design to Dispatch will help the students to understand the Pre-production, production and post-production processes in various departments of garment industry. It will give exposure to the students about planning activities of various departments like assembly, finishing packing etc.

#### COURSE OUTCOMES

After undergoing the subject, students will be able to:

- CO1: Learn the pre-production activities in garment industry.
- CO2: Study the post-production activities in garment industry.
- CO3: Explain the cutting and maker planning activities.
- CO4: Describe the sewing and assembly department in apparel production.
- CO5: Acquire knowledge about the importance of finishing and packing activities in apparel manufacturing.

#### DETAILED CONTENTS

##### UNIT I

###### **Design Development**

**Research-** Market Research, consumer research, product research, market analysis, Fashion trend research, Fashion forecasting.

**Design process-** Design Inspiration, plan a line, Design sketch (with fabric and trim), design selection, deciding preliminary garment specification.

**Design development & Style selection-** Making first pattern, cut & sew prototype (first sample), Approve prototype fit or revise style or drop style, Initial cost estimation, review line, select styles for line.

**UNIT II****Pre-Production**

**Pre production process-** Finalizing production pattern, Order production fabric and trims based on sales order, finalizing garment spec and size spec sheet, grade production pattern in to size range.

**Marker Planning-** Requirements and methods of marker planning

**UNIT III****Production**

**Spreading-** Spreading of fabric to form a lay, Requirements and method of spreading

**Cutting-** Objectives and methods of cutting the fabric.

**Sewing-** stitch classification, seam classification, sewing machine needle- function and parts, types of sewing machine.

**UNIT IV****Accessories & Trims****Use of components and trims**

Labels, motifs, lining, interlining, wadding, lace braid, elastic, hook-loop fastening, seam binding, tape, shoulder pads, eyelets, zip fasteners, buttons, rivets.

**Alternative methods of joining materials**

Fusing- advantages, requirement, process, equipments and methods of fusing.

**UNIT V****Finishing**

Inspection- overview, Pressing- Purpose, equipments and methods, Packaging and dispatch.

**RECOMMENDED BOOKS**

1. Industrial Machinery – Solinger, Oxford University Press, USA
2. Managing Quality – PV Mehta and SK Bhardwaj, New Age Publisher, Delhi
3. Introduction to Clothing Technology – Harold Carr & Latham, John Wiley & Sons, New York
4. Complete guide to sewing by Reader's Digest, Pitman Publishing Corporation, New York
5. Household textiles and laundry work by DurgaDeolkar, Oxford & IBH Publishing Co. Delhi
6. Textile fibres and their use by Hess, Oxford & IBH Publishing Co. Delhi
7. Care Labels – NITTRA publications by Mehta and Bhardwaj, New Age Publishers, Delhi

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- 8. Volume production and Quality Control (vol.I) by AJ Chitter
  - 9. Handbook of Clothing Manufacture by Jacob Solinger
  - 10. The Technology of Clothing Manufacture, Harrold Carr & B. Latham
  - 11. Managing Quality of Apparel Products by P.V. Mehta.

## **RECOMMENDED WEBSITES**

- 1. [www.onlineclothingstudy.com/2017/07/garment-manufacturing-process-fabric-to-fashion.html](http://www.onlineclothingstudy.com/2017/07/garment-manufacturing-process-fabric-to-fashion.html)
- 2. [www.onlineclothingstudy.com/2011/06/pre-production-processes-in-garment.html](http://www.onlineclothingstudy.com/2011/06/pre-production-processes-in-garment.html)
- 3. [www.techpacker.com/blog/manufacturing/pre-production-processes-in-garment-manufacturing/](http://www.techpacker.com/blog/manufacturing/pre-production-processes-in-garment-manufacturing/)
- 4. [www.apparelnetwork.it/the-production-process-in-the-garment-industry/](http://www.apparelnetwork.it/the-production-process-in-the-garment-industry/)
- 5. <http://swayam.gov.in>

## **INSTRUCTIONAL STRATEGY**

This is theoretical subject and contains five units of equal weightage.

### **3.5. PATTERN MAKING AND GARMENT CONSTRUCTION**

<b>L</b>	<b>P</b>
-	8

#### **RATIONALE**

Pattern Making and Garment Construction subject at this level will help the students to convert their designs in to garment by drafting and developing basic patterns, manipulating them to make variations of design, stitching them into complete garments and give them a finishing touch, from scratch with the acquired technical.

#### **COURSE OUTCOMES**

After undergoing the subject, students will be able to:

- CO1: Stitch the variations of Skirt.
- CO2: Construct the variations of T-shirt/ Top.
- CO3: Create the variations of one piece dress / Tunic.
- CO4: Make the variations of Shorts.
- CO5: Handle the variations of Ladies Shirt.

#### **PRACTICAL EXERCISES**

##### **UNIT I**

###### **Variation of a skirt**

Design selection, fabric selection, Drafting, Pattern cutting, Marker planning/ Layout, fabric estimation, Cutting, Stitching and Finishing.

##### **UNIT II**

###### **Variation of a T-shirt/ Tops**

Design selection, fabric selection, Drafting, Pattern cutting, Marker planning/ Layout, fabric estimation, Cutting, Stitching and Finishing.

##### **UNIT III**

###### **One piece dress/ Tunic**

Design selection, fabric selection, Drafting, Pattern cutting, Marker planning/ Layout, fabric estimation, Cutting, Stitching and Finishing.

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## UNIT IV

### Shorts

Design selection, fabric selection, Drafting, Pattern cutting, Marker planning/ Layout, fabric estimation, Cutting, Stitching and Finishing.

## UNIT V

### Ladies Shirt

Design selection, fabric selection, Drafting, Pattern cutting, Marker planning/ Layout, fabric estimation, Cutting, Stitching and Finishing.

## RECOMMENDED BOOKS

1. Pattern Designs for Haute Couture Volume – I
2. Fashion Drawing – The Basic Principles by Anne Allen and Julian Seaman
3. Latest Fashion Style by Winter Hiver
4. Jasmine's "New Look, On Indian Fashion Scene"
5. Lifestyles: Fashion Styles by Kathryn Samuel
6. Draping for Fashion Design by Jaffe, Hilde
7. Armstrong – Pattern Making.

## RECOMMENDED WEBSITES

1. [www.sewguide.com/stitching-patterns/](http://www.sewguide.com/stitching-patterns/)
2. [www.sewguide.com/types-of-skirts/](http://www.sewguide.com/types-of-skirts/)
3. [www.brainkart.com/article/Pattern-Layout-and-Types-of-Pattern-Layouts\\_35623/](http://www.brainkart.com/article/Pattern-Layout-and-Types-of-Pattern-Layouts_35623/)
4. <http://swayam.gov.in>

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject and practical exercises should be practiced in the lab regularly for development of required skills in the students. This subject contains five units of equal weightage.

## **3.6 CAD IN FASHION DESIGN-I**

**L P**  
 - 8

### **RATIONALE**

The term CAD has found its way into all major disciplines that have got anything to do with designing or drafting techniques. The subject will help the students to use Computer Aided design to meet the needs of the users. It will complement the knowledge, skills and ability of the students and enhance their creativity in the field of garment technology.

### **COURSE OUTCOMES**

After undergoing the subject, students will be able to:

- CO1: Create the designs with the help of relevant software.
- CO2: Explore the potential effects of current technological developments in the fashion industry.
- CO3: Handle CorelDraw designing tools. .
- CO4: Develop the skills to use Photoshop designing tools.
- CO5: Design and visualize fashion and clothing using computer.

### **PRACTICAL EXERCISES**

#### **UNIT I**

##### **CorelDraw- Basics and Interface**

Exploring CorelDraw screen, Viewing modes, Inserting and deleting pages, changing pages Customizing options, using multiple workspaces, customizing toolbars, using shortcuts, setting file backups etc.

#### **UNIT II**

##### **CorelDraw- Creation and Manipulation**

Drawing and shaping objects, Selecting & Manipulating Objects, Transforming Objects, Outlining & Filling Objects, Arranging Objects, and Using Layers.

#### **UNIT III**

##### **CorelDraw- Special effects and Text**

Special effects- Artistic Media Tool, Envelope, Extruding, Blending, Lens Effect, Perspectives,

Power Clips, Contours, Drop Shadows, Interactive Fills, Distortions, Interactive Transparencies, Mesh Fills.

**Edit-** Artistic Text, Editing Text, Formatting Text, Setting Text Options, Creating Paragraph Text, Choosing Paragraph Options, Setting Indents Using the Ruler, Importing Text, Using the Spell Checker, Working With Paragraph, Special Text Effects, Using Symbols and Clipart.

## UNIT IV

### Photoshop- Introduction to Essentials

Pixels, Resolution & Color, Exploring the Interface, Choosing File Formats, Exploring and Customizing the Workspace, Using Rulers & Guides, Adjustment tools, Curves Tool vs. the Levels tool, Exploring Hue & Saturation, Cropping & Straightening, Adjusting Color Balance

## UNIT V

### Photoshop- Creation and Manipulation

Introduction to Photoshop Tools, Manual Selection Tools, Quick Selection Tool, Using Adjustment Layers, Layer Masks, Layer Blend Modes, Snapshots & the History Brush, Retouching Tools, Text, Shape Tools, Paths and Smart Objects , Understanding and Manipulating Layers.

## RECOMMENDED BOOKS

1. Literature from the supplier of each software can be consulted
2. CorelDraw12-BPB Publication(latest version)
3. Adobe Photoshop5.5-BPB Publication (latest version)

## RECOMMENDED WEBSITES

1. CorelDRAW Graphics Suite 2021 Quick Start Guide
2. [www.coreldraw.com/en/learn/tutorials/#ctg-apparel](http://www.coreldraw.com/en/learn/tutorials/#ctg-apparel)
3. Adobe Photoshop Learn & Support
4. <http://swayam.gov.in>

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject and practical exercises should be practiced in the lab regularly for development of required skills using CorelDraw and Adobe Photoshop in the students. This subject contains five units of equal weightage.

## FOURTH SEMESTER

4.1	English and Communication Skills - II	72 - 76
4.2	Apparel Management and Quality Control	77 - 78
4.3	Accessory Designing	79 - 81
4.4	CAD in Fashion Design –II	82 - 83
4.5	Open Elective (MOOCs/Offline)	84 - 85
4.6	Minor Project	86 - 87

## **4.1 ENGLISH AND COMMUNICATION SKILL - II**

<b>L</b>	<b>P</b>
<b>2</b>	<b>2</b>

### **RATIONALE**

Communication II moves a step further from Communication Skills I and is aimed at enhancing the linguistic competency of the students. Language as the most commonly used medium of self-expression remains indispensable in all spheres of human life – personal, social and professional. This course is intended to make fresh ground in teaching of Communicative English as per the requirements of National Skill Quality Framework.

### **COURSE OUTCOMES**

After undergoing this course, the learners will be able to:

- CO1: Communicate effectively with an increased confidence; read, write and speak in English language fluently.
- CO2: Comprehend special features of format and style of formal communication through various modes.
- CO3: Write a Report, Resume, make a Presentation, Participate in GDs and Face Interviews
- CO4: Illustrate use of communication to build a positive self-image through self-expression and develop more productive interpersonal relationships.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Reading**

- 1.1 Portrait of a Lady - Khushwant Singh
- 1.2 The Doctor's Word by R K Narayan
- 1.3 Speech by Dr Kiran Bedi at IIM Indore2007 Leadership Concepts
- 1.4 The Bet - by Anton Chekov

#### **UNIT II**

##### **Effective Communication Skills**

- 2.1 Modern means of Communication (Video Conferencing, e-mail, Teleconferencing)

- 
- 2.2 Effective Communication Skills: 7 C's of Communication
  - 2.3 Non-verbal Communication – Significance, Types and Techniques for Effective Communication
  - 2.4 Barriers and Effectiveness in Listening Skills
  - 2.5 Barriers and Effectiveness in Speaking Skills

### **Unit III**

#### **Professional Writing**

- 3.1 Correspondence: Enquiry letters, placing orders, complaint letters
- 3.2 Report Writing
- 3.3 Memos
- 3.4 Circulars
- 3.5 Press Release
- 3.6 Inspection Notes and tips for Note-taking
- 3.7 Corrigendum writing
- 3.8 Cover Letter

### **UNIT IV**

#### **Grammar and Vocabulary**

- 4.1 Prepositions
- 4.2 Conjunctions
- 4.3 Punctuation
- 4.4 Idioms and Phrases: A bird of ill omen, A bird's eye view, A burning question, A child's play, A cat and dog life, A feather in one's cap, A fish out of water, A shark, A snail's pace, A snake in the grass, A wild goose chase, As busy as a bee, As faithful as dog, Apple of One's eye, Behind one's back, Breath one's last, Below the belt, Beat about the bush, Birds of a feather flock together, Black Sheep, Blue blood, By hook or crook, Chicken hearted, Cut a sorry figure ,Hand in glove, In black and white, In the twinkling, In full swing ,Is blind as a bat, No rose without a thorn, Once in a blue moon, Out of the frying pan in to the fire, know no bounds ,To back out, To bell the cat, To blow one's trumpet, To call a spade a spade, To cut one's coat according to one's cloth, To eat humble pie, To give ear to, To have a thing on one's finger tips, To have one's foot in the grave, To hold one's tongue, To kill two birds with one stone, To make an ass of oneself, To put two and two together, To the back bone, Turn coat, ups and downs.
- 4.5 Pairs of words commonly misused and confused: Accept-except, Access-excess, Affect-effect, Artificial- artful, Aspire-expire, Bail-bale, Bare-bear, Berth-birth, Beside-besides,

Break-brake, Canvas-canvass, Course- coarse, Casual-causal, Council-counsel, Continual-continuous, Coma-comma, Cue- queue, Corpse- corps-core, Dairy-diary, Desert-dessert, Dual-duel, Dew- due, Die-dye, Draft- draught-drought, Device-devise, Doze-dose, Eligible-illegible, Emigrant- immigrant, Envelop-envelope, Farther-further, Gate-gait, Goal-goal, Human-humane, Honorable-honorary, Hail-hale, Hair-heir-hare, Industrial-industrious, Impossible- impassable, Idle-idol-ideal, Lose-loose, Later-latter, Lesson-lessen, Main-Mane, Mental-mantle, Metal-mettle, Meter-metre, Oar-ore, Pray-prey, Plain-plan, Principal - principle, Personal- personnel, Roll- role, Route-rout- roote, Stationary-stationery, Union- unity, Urban- urbane, Vocation- vacation, Vain- vein-vane, Vary- very.

- 4.6 Translation of Administrative and Technical Terms in Hindi or Mother tongue: Academy, Abandon, Acting in official capacity, Administrator, Admission, Aforesaid, Affidavit, Agenda, Alma Master, Ambiguous, Appointing Authority, Apprentice, Additional, Advertisement, Assistant, Assumption of charge, Assurance, Attested copy, Bonafide, Bond, Cashier, Chief Minister, Chief Justice Clerical error, Commanding Officer, Consent, Contractor, corruption, Craftsman, Compensation, Code, Compensatory allowance, Compile, Confidential letter, Daily Wager, Data, Dearness allowance, Death - Cum Retirement, Dispatch, Dispatch Register, Disciplinary, Disciplinary Action, Disparity Department, Dictionary, Director, Director of Technical Education, Earned Leave, Efficiency Bar, Estate, Exemption, Executive Engineer, Extraordinary, Employment Exchange, Flying Squad, General Body, Head Clerk, Head Office, High Commission, Inconvenience, Income Tax, Indian Assembly Service, Justify, Legislative Assembly, Negligence, Officiating ,Office Record, Office Discipline, On Probation, Part Time, Performance, Polytechnic, Proof Reader Precautionary, Provisional, Qualified, Regret, Responsibility, Self-Sufficient, Senior, Simultaneous ,Staff, Stenography ,Superior, Slate, Takeover, Target Data Technical Approval, Tenure, Temporary, Timely Compliance, Under Investigation, Under Consideration, Verification, Viva-voce, Write off, Working Committee, Warning, Yours Faithfully , Zero Hour.

## UNIT V

### Employability Skills

- 5.1 Presentation Skills: How to prepare and deliver a good presentation
- 5.2 Telephone Etiquettes
- 5.3 Importance of developing employable and soft skills
- 5.4 Resume Writing: Definition, Kinds of Resume, Difference between Bio-data and Curriculum Vitae and Preparing a Resume for Job/ Internship

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- 5.5 Group discussions: Concept and fundamentals of GD, and learning Group Dynamics.
  - 5.6 Case Studies and Role Plays

## PRACTICAL EXERCISES

- 1. Reading Practice of the above lessons in the Lab Activity classes.
- 2. Comprehension exercises of unseen passages along with the given lessons.
- 3. Vocabulary enrichment and grammar exercises based on the above selective readings.
- 4. Situational Conversation: Requesting and responding to requests; Expressing sympathy and condolence.
- 5. Warning; Asking and giving information.
- 6. Getting and giving permission.
- 7. Asking for and giving opinions.
- 8. A small formal and informal speech.
- 9. Seminar.
- 10. Debate.
- 11. Interview Skills: Preparing for the Interview and guidelines for success in the Interview and significance of acceptable body-language during the Interview.
- 12. Written Drills will be undertaken in the class to facilitate a holistic linguistic competency among learners.
- 13. Participation in a GD, Functional and Non-functional roles in GD, Case Studies and Role Plays
- 14. Presentations, using audio-visual aids (including power-point).
- 15. Telephonic interviews, face to face interviews.
- 16. Presentations as Mode of Communication: Persuasive Presentations using multi-media aids.
- 17. Practice of idioms and phrases on: Above board , Apple of One's eye , At sea, At random, At large, A burning question, A child's play, A wolf in sheep's clothing, A deal, Breath one's last, Bid fair to, Beat about the bush, Blue Blood, Big Gun, Bring to Book, Cut a sorry figure, Call names, Carry weight, Dark Horse, Eat Humble pie, Feel small, French leave, Grease the palm, Go against the grains, Get One's nerves, Hard and Fast, Hue and Cry, Head and ears, In full swing, Jack of all trades, know no bounds, kiss the dust, Keep an eye on, Lion's share, learn by rote, Null and void, on the cards, Pull a long face, Run amuck, Right and Left, Rain on Shine, Small talk, Take to one's heels, Tooth and nail, to take by storm, , Wet blanket, Yearn for.

## RECOMMENDED BOOKS

1. Alvinder Dhillon and Parmod Kumar Singla, "Text Book of English and Communication Skills Vol – 1, 2", M/s Abhishek Publications, Chandigarh.
2. J Sethi, Kamlesh Sadanand & DV Jindal, "Course in English Pronunciation", PHI Learning Pvt. Ltd., New Delhi.
3. Wren and Martin, "High School English Grammar and Composition".
4. NK Aggarwal and FT Wood, "English Grammar, Composition and Usage", Macmillan Publishers India Ltd., New Delhi.
5. RC Sharma, and Krishna Mohan, "Business Correspondence & Report Writing", (4<sup>th</sup> Edition), by Tata MC Graw Hills, New Delhi.
6. Varinder Kumar, Bodh Raj & NP Manocha, "Business Communication Skills", Kalyani Publisher, New Delhi.
7. Kavita Tyagi & Padma Misra, "Professional Communication", PHI Learning Pvt. Ltd., New Delhi.
8. Nira Konar, "Communication Skills for Professionals", PHI Learning Pvt. Ltd., New Delhi.
9. Krishna Mohan & Meera Banerji, "Developing Communication Skills", (2<sup>nd</sup> Edition), Macmillan Publishers India Ltd., New Delhi.
10. M. Ashraf Rizwi, "Effective Technical Communication", Tata MC Graw Hills, New Delhi.
11. Andrea J Rutherford, "Basic Communication Skills for Technology", Pearson Education, New Delhi.

## INSTRUCTIONAL STRATEGY

This is practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required communication skills in the students. Emphasis should be given on practicing of communication skills. This subject contains five unit of equal weight age.

## **4.2 APPAREL MANAGEMENT AND QUALITY CONTROL**

<b>L</b>	<b>P</b>
<b>4</b>	-

### **RATIONALE**

The students of fashion design should know about the basic apparel production terms, production processes and material handling. The subject aims at developing knowledge of apparel production management and quality control in the students to make them aware about the working of apparel production unit.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Study Basic Production Terms.
- CO2: Learn various Production Processes.
- CO3: Acquire knowledge about Material Handling.
- CO4: Describe Quality Control.
- CO5: Explain Garment inspection system.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Introduction to Basic Production Terminology**

Production, productivity, work in process, CMT, Mark Trade, JIT, Quick Response System (QRS), Time Study, Motion Study, Ergonomics

#### **UNIT II**

##### **Production Systems**

Progressive Bundle System, Modular Production System, Unit Production System, advantages and disadvantages of all production systems.

#### **UNIT III**

##### **Material Handling**

Material Handling System, Material handling equipment for cutting department, Material handling equipment for stitching department, Material handling equipment for finishing, department.

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## UNIT IV

### Quality Control

Definition of - Quality, Quality management, Quality system, Quality plan, Quality assurance, Quality control, Inspection, SQC, TQM, Testing, 7 tools of quality control and 4 costs of quality.

## UNIT V

### Inspection

Inspection- definition, principles and objective, stages of inspection- raw material inspection, In-process inspection and final inspection, AQL, Classification of defects- minor, major and critical.

## RECOMMENDED BOOKS

1. Managing Quality in the Apparel Industry by Pradip V. Mehta and Satish K. Bhardwaj by New Age International Publishers.
2. Apparel Production Terms & Processes by Janace E. Bubonia, Texas Christian University.
3. Introduction to Clothing Production Management by A.J. Chuter by Wiley India Pvt. Ltd.
4. Introduction to Clothing Production Manufacturing by Gerry Cooklin by Blackwell publishing.

## RECOMMENDED WEBSITES

1. [www.businessjargons.com/retailing.html](http://www.businessjargons.com/retailing.html)
2. [www.tutorialspoint.com/retail\\_management/retail\\_management Tutorial.pdf](http://www.tutorialspoint.com/retail_management/retail_management Tutorial.pdf)
3. [www.sim.edu.in/wp-content/uploads/2018/02/RETAIL-MANAGEMENT-Notes.pdf](http://www.sim.edu.in/wp-content/uploads/2018/02/RETAIL-MANAGEMENT-Notes.pdf)
4. <http://swayam.gov.in>

## INSTRUCTIONAL STRATEGY

This is theoretical subject and contains five units of equal weightage.

## 4.3 ACCESSORY DESIGNING

<b>L</b>	<b>P</b>
<b>2</b>	<b>4</b>

### **RATIONALE**

The knowledge and skill related to accessory designing is essential for the students of Fashion Design in order to create a complete look of their designs. Also this skill can help them in opening an alternate career of accessory designer.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Study the type of Footwear.
- CO2: Learn the type of Handbags.
- CO3: Acquire Knowledge about the type of Belt & Glove.
- CO4: Describe the type of Jewelry.
- CO5: Create Design of various accessories.

### **DETAILED CONTENTS**

#### **UNIT I**

##### **Introduction to Fashion Accessories**

Introduction to various fashion accessories- footwear, handbags, hats, jewelry, belts & gloves.

#### **UNIT II**

##### **Footwear**

Evolution of footwear, anatomy of footwear, types of footwear, raw material for footwear, international labels and designers of footwear.

#### **UNIT III**

##### **Handbags**

Evolution of handbag, anatomy of handbag, types of handbag, raw material for handbag, international labels and designers of handbag.

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## UNIT IV

### Belts and Gloves

Evolution of belt & Gloves, types of belt & Gloves, raw material for belt & Gloves, international labels and designers of belt & Gloves.

## UNIT V

### Jewelry

History of jewelry, types of jewelry, raw material for jewelry, international labels and designers of jewelry.

Gemology- introduction to gems basic qualities of gems, healing properties of gems.

## PRACTICAL EXERCISES

1. Sheet demonstrating various types of female footwear.
  2. Sheet demonstrating various types of male footwear.
  3. Sheet demonstrating various types of handbags.
  4. Sheet demonstrating various types of hats.
  5. Sheet demonstrating types of gloves.
  6. Sheet demonstrating types of Belts.
  7. Sheet demonstrating types of necklace.
  8. Sheet demonstrating types of ear rings.
  9. Sheet demonstrating types of rings 9.
  10. Sheet demonstrating types of bangles and bracelets.
  11. Sheet of handbag designed by student.
  12. Sheet of footwear designed by student.
  13. Sheet of jewelry designed by student.
  14. Sheet of belt designed by student.
  15. Sheet of glove designed by student.
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## RECOMMENDED BOOKS

1. Bina Abing "Fashion Sketch Book", Om Publication.
2. Frings, " Fashion from Concept to Consumer 7th Edition", Pearson.
3. Tate, Inside Fashion Design, Dorling Kindersley
4. Meadows Celia Stall, Know your Fashion Accessories, Fairchild books, 2003.
5. Tyler, "Carr and Latham's Technology of Clothing Manufacturing" Blackwell, Scientific Publications, 1988.
6. Diamond Ellen and Diamond Jay, Fashion Apparel & Accessories and Home Furnishing, Pearson's Prentice Hall, NJ, 2007.

## RECOMMENDED WEBSITES

1. [www.sewguide.com/types-of-fashion-accessories](http://www.sewguide.com/types-of-fashion-accessories)
2. [www.en.wikipedia.org/wiki/Fashion\\_accessory](http://www.en.wikipedia.org/wiki/Fashion_accessory)
3. [eucarlwears.com/fashion-accessories-definition-types-and-examples/](http://eucarlwears.com/fashion-accessories-definition-types-and-examples/)
4. <http://swayam.gov.in>

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weight age.

## **4.4 CAD IN FASHION DESIGN - II**

L	P
-	6

### **RATIONALE**

CAD in fashion design II moves a step further from CAD in fashion design I and is aimed at enhancing the computer aided fashion design competencies of the students. The subject will further help the students to use Computer Aided design to meet the advanced needs of the customers. It will further complement the knowledge, skills and ability of the students and enhance their creativity in the field of garment technology.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Create the designs with the help of relevant software.
- CO2: Explore the potential effects of current technological developments in the fashion industry.
- CO3: Handle CorelDraw designing tools. .
- CO4: Develop the skills to use Photoshop designing tools.
- CO5: Design and visualize fashion and clothing using computer.

### **PRACTICAL EXERCISES**

#### **UNIT 1**

Using Corel Draw to design 3 profiles of female flesh figures (front, back and side view)

#### **UNIT 2**

Using Corel Draw and Adobe Photoshop to design an executive wear along with accessories.

#### **UNIT 3**

Using Corel Draw and Adobe Photoshop to design an ethnic wear along with accessories.

#### **UNIT 4**

Pick up a costume worn by a famous fashion model. Scan his/her figure and redesign the texture and the color combination of the dress.

#### **UNIT 5**

Design a mood/story board according to the selected theme, Logo and Labels designing, create a brochure for your own label

## **RECOMMENDED BOOKS**

1. Literature from the supplier of each software can be consulted
2. CorelDraw12-BPB Publication (latest version)
3. AdobePhotoshop5.5-BPB Publication (latest version)

## **RECOMMENDED WEBSITES**

1. CorelDRAW Graphics Suite 2021 Quick Start Guide
2. [www.coreldraw.com/en/learn/tutorials/#ctg-apparel](http://www.coreldraw.com/en/learn/tutorials/#ctg-apparel)
3. Adobe Photoshop Learn & Support
4. <http://swayam.gov.in>

## **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and practical exercises should be practiced in the lab regularly for development of required skills using CorelDraw and Adobe Photoshop in the students. This subject contains five units of equal weightage.

## 4.5 OPEN ELECTIVE

L	P
2	-

### **RATIONALE**

Open electives are very important and play major role in implementation of National Education Policy. These subjects provide greater autonomy to the students in the curriculum, giving them the opportunity to customize it to reflect their passions and interests. The system of open electives also encourages cross learning, as students pick and choose subjects from the different streams.

### **COURSE OUTCOMES**

At the end of the open elective, the students will be able to:

- CO1: State the basic concepts and principles about the subject of interest.
- CO2: Perform in a better way in the professional world.
- CO3: Select and learn the subject related to own interest.
- CO4: Explore latest developments in the field of interest.
- CO5: Develop the habit of self-learning through online courses.

### **LIST OF OPEN ELECTIVES (The list is indicative and not exhaustive)**

1. Computer Application in Business
2. Introduction to NGO Management
3. Basics of Event Management
4. Event Planning
5. Administrative Law
6. Introduction to Advertising
7. Moodle Learning Management System
8. Linux Operating System
9. E-Commerce Technologies
10. NCC
11. Marketing and Sales
12. Graphics and Animations
13. Digital Marketing
14. Human Resource Management
15. Supply Chain Management

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## 16. TQM

### **GUIDELINES**

Open Elective shall be offered preferably in online mode. Online mode open elective shall preferably be through Massive Open Online Courses (MOOCs) from Swayam, NPTEL, Upgrad, Udemy, Khan Academy or any other online portal to promote self-learning. A flexible basket of large number of open electives is suggested which can be modified depending upon the availability of courses at suggested portals and requirements. For online open electives, department coordinators shall be assigned to monitor and guide the group of students for selection of minimum 20 hours duration online course of their choice. For offline open electives, a suitable relevant subject shall be offered by the respective department to the students with minimum 40% of the total class strength as per present and future requirements.

Assessment of MOOCs open elective shall be based on continuous evaluation by the respective coordinator. The coordinator shall consider the submitted assignments by the students from time to time during the conduct of MOOCs. The MOOCs assessment shall be conducted by the coordinator along with one external expert by considering submitted assignments out of 100 marks.

In case, no suitable open elective is available online, only then the course may be conducted in offline mode. The assessment of offline open elective shall be internal and external. The offline open elective internal assessment of 40 marks shall be based on internal sessional tests; assignments etc. and external assessment of 60 marks shall be based on external examination at institute level.

#### **NOTE**

The students enrolled under NCC will compulsorily undertake NCC as an open elective subject.

### **SUGGESTED WEBSITES**

1. <https://swayam.gov.in/>
2. <https://www.udemy.com/>
3. <https://www.upgrad.com/>
4. <https://www.khanacademy.org/>

## **4.6 MINOR PROJECT**

L	P
-	8

### **RATIONALE**

Minor project work will help in developing the relevant skills among the students as per National Skill Qualification Framework. It aims at exposing the students to the present and future needs of various relevant industries. It is expected from the students to get acquainted with desired attributes for industrial environment. For this purpose, students are required to be involved in Minor Project Work in different establishments.

### **COURSE OUTCOMES**

After undergoing this course, the students will be able to:

- CO1: Define the problem statement of the minor project according to the need of industry.
- CO2: Work as a team member for successful completion of minor project.
- CO3: Write the minor project report effectively.
- CO4: Present the minor project report using PPT.

### **GUIDELINES**

Depending upon the interest of the students, they can develop minor projects as per present and future demand of the industry. The supervisors may guide the students to identify their minor project work and chalk out their plan of action well in advance. As a minor project activity each student is supposed to study the operations at site and prepare a detailed project report of the observations/processes/activities. The supervisor may create a group of 4-5 students as per their interest to work as a team for successful completion of the minor project.

The supervisor shall evaluate the students along with one external expert by considering the following parameters:

	<b>Parameter</b>	<b>Weightage</b>
I	Defining problem statement, focus and approach	20%
ii	Innovation / creativity	20%
iii	Report Writing	20%
iv	Power Point Presentation	20%
v	Viva - voce	20%

# **THIRD YEAR**

## **NSQF LEVEL - 5**

## 18. STUDY AND EVALUATION SCHEME

### FIFTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits L+P= C	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT								
		L	P		Th	Pr	Total	Th	Pr	Total			
5.1	Industrial Training - II	-	2	0+1=1	-	40	40	-	60	60	100		
5.2	Fashion Merchandising	4	-	4+0=4	40	-	40	60	-	60	100		
5.3	Advanced Pattern Making and Garment Construction	-	10	0+5=5	-	40	40	-	60	60	100		
5.4	Fashion Sourcing	-	10	0+5=5	-	40	40	-	60	60	100		
5.5	Programme Elective - I	2	2	2+1=3	40	40	80	60	60	120	200		
5.6	Multidisciplinary Elective (MOOCs <sup>+</sup> /Offline)	2	-	2+0=2	40	-	40	60	-	60	100		
# SCA		-	3	-	-	-	-	-	-	-	-		
<b>Total</b>		<b>08</b>	<b>27</b>	<b>20</b>	<b>120</b>	<b>160</b>	<b>280</b>	<b>180</b>	<b>240</b>	<b>420</b>	<b>700</b>		

+ Assessment of Multidisciplinary Elective through MOOCs shall be based on assignments out of 100 marks.

**Programme Elective I:** **5.5.1** Home Fashion **5.5.2** Sustainable Fashion **5.5.3** Smart Textile

# Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Electoral Literacy, Motor Vehicles (Driving) Regulations 2017 etc., games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self-study etc.

**SIXTH SEMESTER**

Sr. No.	SUBJECTS	STUDY SCHEME		Credits (C) $L + P = C$	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External		
		Periods/Week			INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	P		Th	Pr	Total	Th	Pr	Total			
6.1	Fabric Designing	-	6	0+3=3	-	40	40	-	60	60	100		
6.2	*Entrepreneurship Development & Management	3	-	3+0=3	40	-	40	60	-	60	100		
6.3	Portfolio using CAD	-	6	0+3=3	-	40	40	-	60	60	100		
6.4	Programme Elective - II	2	2	2+1=3	40	40	80	60	60	120	200		
6.5	Major Project/Industrial Training	-	16	0+8=8	-	40	40	-	60	60	100		
# Student Centered Activities (SCA)		-	-	-	-	-	-	-	-	-	-		
Total		<b>05</b>	<b>30</b>	<b>20</b>	<b>80</b>	<b>160</b>	<b>240</b>	<b>120</b>	<b>240</b>	<b>360</b>	<b>600</b>		

\* Common with other Diploma Courses.

**Programme Elective II:** 6.4.1 Footwear Designing 6.4.2 Leather Designing 6.4.3 Jewelry Designing

# Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Electoral Literacy, Motor Vehicles (Driving) Regulations 2017 etc., games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self-study etc.

## 19. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION

<b>Sr. No.</b>	<b>Subjects/Areas</b>	<b>Hours Per Week</b>	
		<b>Fifth Semester</b>	<b>Sixth Semester</b>
1.	Industrial Training - II	2	-
2.	Fashion Merchandising	4	-
3.	Advanced Pattern Making and Garment Construction	10	-
4.	Fashion Sourcing	10	-
5.	Programme Elective - I	4	-
6.	Multidisciplinary Elective (MOOCs/Offline)	2	-
7.	Fabric Designing	-	6
8.	Entrepreneurship Development & Management	-	3
9.	Portfolio using CAD	-	6
10.	Programme Elective - II	-	4
11.	Major Project/Industrial Training	-	16
12.	Student Centred Activities	3	-
<b>Total</b>		<b>35</b>	<b>35</b>

## 20. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

Government and private sectors related to **Fashion Design** require **supervisors** having well developed skills with clear choice of procedures. They are expected to have complete knowledge and practical skills related to fashion design field. They shall be able to communicate clearly with others. Diploma holders after passing level 5 shall have understanding of desired mathematical skills and understanding of social and natural environment. They are expected to collect, organize and communicate information effectively.

Work requiring knowledge, skills and aptitudes at level 5 will also be carried out in familiar situations, but also ones where problems may arise. Job holders will be able to make choices about the best procedures to adopt to address problems where the choices are clear. Individuals in jobs which require level 5 qualifications will normally be responsible for the completion of their own work and expected to learn and improve their performance on the job. They will require well developed practical and cognitive skills to complete their work. They may also have some responsibility for others' work and learning.

Fashion Design diploma pass out students will be expected to understand what constitutes quality in the occupation and will distinguish between good and bad quality in the context of their work. They will be expected to operate hygienically and in ways which show an understanding of environmental issues. They will take account of health and safety issues as they affect the work they carry out or supervise. They are expected to have good practical knowledge of advanced pattern making, garment Construction, fashion sourcing, fashion designing and CAD portfolio for effective working in fashion design industries. They are also expected to have clear theoretical concepts of Fashion Merchandising.

Fashion design diploma students are expected to work for a wide variety of employers as fashion designers. They have wide scope to work as supervisor in export houses, import houses, domestic industries, freelancer in different activities related to fashion designing, fashion merchandising in marketing, production and quality control units in garment manufacturing industries. They can start their own small startup in the area of marketing, sales, manufacturing and production etc.

## 21. PROGRAMME OUTCOMES

The programme outcomes are derived from five domains of NSQF Level – 5 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this level, the student will be able to:

**PO1:** Perform task that require well developed skills with clear choice of procedures.

**PO2:** Acquire knowledge of facts, principles and processes related to fashion design.

**PO3:** Demonstrate cognitive and practical skills to complete tasks and solve problems.

**PO4:** Develop skills to collect, organize and communicate information.

**PO5:** Accomplish own work and supervise others work.

**PO6:** Select online multidisciplinary electives of own interest to promote self-learning.

## 22. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

<b>Programme Outcomes to be assessed</b>	<b>Assessment criteria for the Course Outcomes</b>
<p><b>PO1:</b> Perform task that require well developed skills with clear choice of procedures.</p>	<ul style="list-style-type: none"> <li>• Stitch Salwar Kameez.</li> <li>• Construct Kalidar Kurta &amp; Chudidar Pyjami.</li> <li>• Create Basic Blouse and a Variation.</li> <li>• Make a Trouser.</li> <li>• Handle the construction of Jump Suit.</li> <li>• Select various types of fabrics available in local market.</li> <li>• Handle various types of functional trims available in local market.</li> <li>• Practice various types of decorative trims available in local market.</li> <li>• Utilize various types of Packaging material and labels available in local market.</li> <li>• Prepare the fashion catalog.</li> <li>• Utilize various Home Fashion products.</li> <li>• Handle various Upholstery Fabrics.</li> <li>• Utilize the concept Eco Fashion.</li> <li>• Handle the Fashion waste and up-cycling.</li> <li>• Classify various Protective Clothing &amp; Sports-functional clothing.</li> <li>• Describe Medical-functional clothing &amp; Clothing for special needs.</li> <li>• Develop different motifs by using printing.</li> <li>• Place motif in repeat pattern.</li> <li>• Create print as per trend forecast.</li> <li>• Generate self-designs in the fabrics</li> <li>• Design fabrics for home fashion and apparels</li> <li>• Design a collection inspired by any folk art digitally.</li> <li>• Handle the process of designing a collection inspired by nature digitally.</li> <li>• Develop and design a collection inspired by any</li> </ul>

	<ul style="list-style-type: none"> <li>• festival digitally</li> <li>• Prepare a design of collection inspired by any architecture digitally.</li> <li>• Create a design of collection inspired by fusion digitally.</li> <li>• Handle and classify the parts of footwear</li> <li>• Learn and design a footwear</li> <li>• Describe and handle various tools and machinery used for leather goods</li> <li>• Learn and design leather goods</li> <li>• Classify various types of diamond and pearls</li> <li>• Describe various gems and metals</li> </ul>
<b>PO2:</b> Acquire knowledge of facts, principles and processes related to fashion design.	<ul style="list-style-type: none"> <li>• Explain the fundamental of fashion merchandising</li> <li>• Describe the fashion merchandising terminology</li> <li>• Classify the Types of Fashion merchandising</li> <li>• Learn the concept product development</li> <li>• Differentiate the concept of fashion marketing-process, functions and activities</li> <li>• Explain the various categories of Bed Linen.</li> <li>• Describe the types of Floor Covering.</li> <li>• Learn about various types of Curtains.</li> <li>• Learn the fundamental of Sustainable Fashion.</li> <li>• Explain the Sustainable Fashion Terminology.</li> <li>• Differentiate the Types of Eco Fibers and Fabrics.</li> <li>• Learn about Smart Textiles.</li> <li>• Differentiate various Smart Textiles products.</li> <li>• Explain various Functional Clothing.</li> <li>• Differentiate various styles of footwear.</li> <li>• Explain the anatomy of human foot.</li> <li>• Describe the various foot sizing systems.</li> <li>• Differentiate various types of leather</li> <li>• Explain the processing of leather</li> <li>• Classify the leather goods</li> </ul>

	<ul style="list-style-type: none"> <li>• Learn about the fundamentals of jewelry designing</li> <li>• Differentiate various Indian jewelry articles</li> <li>• Explain the basics of jewelry items</li> </ul>
<b>PO3:</b> Demonstrate cognitive and practical skills to complete tasks and solve problems.	<ul style="list-style-type: none"> <li>• Stitch Salwar Kameez.</li> <li>• Construct Kalidar Kurta &amp; Chudidar Pyjami.</li> <li>• Create Basic Blouse and a Variation.</li> <li>• Make a Trouser.</li> <li>• Handle the construction of Jump Suit.</li> <li>• Select various types of fabrics available in local market.</li> <li>• Handle various types of functional trims available in local market.</li> <li>• Practice various types of decorative trims available in local market.</li> <li>• Utilize various types of Packaging material and labels available in local market.</li> <li>• Prepare the fashion catalog.</li> <li>• Utilize various Home Fashion products.</li> <li>• Handle various Upholstery Fabrics.</li> <li>• Utilize the concept Eco Fashion.</li> <li>• Handle the Fashion waste and up-cycling.</li> <li>• Classify various Protective Clothing &amp; Sports-functional clothing.</li> <li>• Describe Medical-functional clothing &amp; Clothing for special needs.</li> <li>• Develop different motifs by using printing.</li> <li>• Place motif in repeat pattern.</li> <li>• Create print as per trend forecast.</li> <li>• Generate self-designs in the fabrics</li> <li>• Design fabrics for home fashion and apparels</li> <li>• Design a collection inspired by any folk art digitally.</li> <li>• Handle the process of designing a collection inspired by nature digitally.</li> <li>• Develop and design a collection inspired by any</li> </ul>

	<p>festival digitally</p> <ul style="list-style-type: none"> <li>• Prepare a design of collection inspired by any architecture digitally.</li> <li>• Create a design of collection inspired by fusion digitally.</li> <li>• Handle and classify the parts of footwear</li> <li>• Learn and design a footwear</li> <li>• Describe and handle various tools and machinery used for leather goods</li> <li>• Learn and design leather goods</li> <li>• Classify various types of diamond and pearls</li> <li>• Describe various gems and metals</li> </ul>
<b>PO4:</b> Develop skills to collect, organize and communicate information.	<ul style="list-style-type: none"> <li>• Understand the working environment of industries</li> <li>• Learn about present and future requirement of industries.</li> <li>• Develop writing, speaking and presentations skills.</li> <li>• Observe technological developments as per present and future needs of industries.</li> <li>• Collect, communicate and manage the data from connected devices.</li> <li>• Comprehend the importance of entrepreneurship and its role in nation's development.</li> <li>• Classify the various types of business and business organizations.</li> <li>• Identify the various resources / sources and / or schemes for starting a new venture.</li> <li>• Explain the principles of management including its functions in an organisation.</li> <li>• Conduct market survey and prepare project report.</li> <li>• Define the problem statement of the Major project/Industrial training according to the need of industry.</li> <li>• Write the Major project / Industrial training report effectively.</li> <li>• Present the Major project / Industrial training report using PPT.</li> </ul>

<b>PO5:</b> Accomplish own work and supervise others work.	<ul style="list-style-type: none"> <li>• Take necessary safety precautions and measures.</li> <li>• Work in team for solving industrial problems</li> <li>• Develop competencies and skills required by relevant industries.</li> <li>• Define the problem statement of the Major project / Industrial training according to the need of industry.</li> <li>• Work as a team member for successful completion of Major project / Industrial training.</li> <li>• Write the Major project / Industrial training report effectively.</li> <li>• Present the Major project / Industrial training report using PPT.</li> </ul>
<b>PO6:</b> Select online multidisciplinary electives of own interest to promote self-learning.	<ul style="list-style-type: none"> <li>• Apply critical thinking in problem solving.</li> <li>• Demonstrate self and time management.</li> <li>• Display analytical and research abilities.</li> <li>• Integrate multiple knowledge domains.</li> <li>• Enhance the scope and depth of learning.</li> </ul>

## **23. SUBJECTS & CONTENTS (THIRD YEAR)**

## FIFTH SEMESTER

5.1	Industrial Training - II	98-99
5.2	Fashion Merchandising	100-101
5.3	Advanced Pattern Making and Garment Construction	102-103
5.4	Fashion Sourcing	104-105
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5.6	Multidisciplinary Elective(MOOCs/Offline)	114-115

## 5.1 INDUSTRIAL TRAINING-II

<b>L</b>	<b>P</b>
-	2

### RATIONALE

Industrial training will help the students to understand the working environment of relevant industries. The student will learn to work in team to solve the industrial problems. It will also give exposure about the present and future requirements of the relevant industries. This training is very important for development of required competencies and skills for employment and start-ups.

### COURSE OUTCOMES

After undergoing the training, the students will be able to:

- CO1: Understand the working environment of industries
- CO2: Take necessary safety precautions and measures.
- CO3: Learn about present and future requirement of industries.
- CO4: Work in team for solving industrial problems
- CO5: Develop competencies and skills required by relevant industries.
- CO6: Develop writing, speaking and presentations skills.

### PRACTICAL EXERCISES

1. Report writing based on industrial training.
2. Preparation of Power Point Slides based on industrial training and presentation by the candidate.
3. Internal Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.
4. External Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.

## GUIDELINES

Students will be evaluated based on Industrial training report and their presentation using Power Point about the knowledge and skills gained during the training. The Head of the Department will depute faculty coordinators by assigning a group of students to each. The coordinators will mentor and guide the students in preparing the PPTs for final presentation. The following performance parameters are to be considered for assessment of the students out of 100 marks:

	<b>Parameter</b>	<b>Weightage</b>
i	Industrial assessment of the candidate by the trainer	40%
ii	Report Writing	20%
iii	Power Point Presentation	20%
iv	Viva-voce	20%

## 5.2 FASHION MERCHANDISING

<b>L</b>	<b>P</b>
<b>4</b>	-

### RATIONALE

Fashion design diploma holders are expected to have good understanding of Fashion merchandising and marketing. This subject will help the students to understand the concept of marketing and merchandising of fashion goods. Students will also get an insight exposure about trade in fashion industry. It will further help the students to study the concept of product development.

### COURSE OUTCOMES

After undergoing the subject, the students will be able to:

- CO1: Explain the fundamental of fashion merchandising
- CO2: Describe the fashion merchandising terminology
- CO3: Classify the Types of Fashion merchandising
- CO4: Learn the concept product development
- CO5: Differentiate the concept of fashion marketing- process, functions and activities

### DETAILED CONTENTS

#### UNIT I

##### **Fashion Merchandising**

Merchandising- Introduction and Importance, Fashion merchandising- Concept and Principles, Fashion Merchandiser roles and skills, Scope of Fashion Merchandising.

#### UNIT II

##### **Fashion merchandising terminology**

Fashion Merchandising terminology- Brand, Category, Discounting, Tech Pack, cost sheet, Trim Card, Merchandise, Pricing, Product Mix, Stock outs, Supply Chain, Target Market, Unsought goods, Staple Goods, Product line, Accessories, Advertisement, BoM, INCO Terms – LC, Bill of lading. Role of Merchandiser in - Buying Agency, Export House and Retail Merchandising.

**UNIT III****Types of Fashion Merchandising**

Types of Fashion Merchandising – Buyer merchandising, Production/Export merchandising and Retail merchandising. Introduction to Export house, Manufacturing unit and Buying house.

**UNIT IV****Product development**

Introduction to Product development, Objective of Product development, Sample - Proto, Fit, salesman, and Pre production.

**UNIT V****Fashion Marketing**

Fashion Marketing-Concept and Process, Functions of Fashion Marketing, Activities of Fashion Marketing.

**RECOMMENDED BOOKS**

1. Principles of Marketing (basic concepts of marketing) Philip T Kotler Pearson Publication 1999 Retail fashion promotion and advertising by Jauice Harriosn Hebet Grumwald.
2. Principles of Marketing Kavita Sharma & Swati Aggarwal, 2nd Edition Taxmann's Publication 2021
3. Principles of Marketing CBCS Book Edition IGNOU Publications
4. Fashion Marketing, Third Edition by Mike Easey, Blackwell Publishing, 2009
5. Marketing The Basics by Karl Moore and Niketh Pareek, Routledge Publications, 2010

**RECOMMENDED WEBSITES**

1. [www.textilelearner.net/fashion-merchandising-and-merchandiser](http://www.textilelearner.net/fashion-merchandising-and-merchandiser)
2. [www.luxuryfashionista.com/what-is-fashion-merchandising](http://www.luxuryfashionista.com/what-is-fashion-merchandising)
3. [www.textilefashionstudy.com/fashion-merchandising-principles-roles](http://www.textilefashionstudy.com/fashion-merchandising-principles-roles)

**INSTRUCTIONAL STRATEGY**

This is theoretical subject with five units of equal weight age.

## **5.3 ADVANCED PATTERN MAKING AND GARMENT CONSTRCUTION**

<b>L</b>	<b>P</b>
-	<b>10</b>

### **RATIONALE**

The knowledge and skills of advanced pattern making and garment construction is important for fashion design diploma holders. It will help the students to convert their designs in to garment by drafting and developing basic patterns, manipulating them to make variations of design, stitching them into complete garments and give them a finishing touch starting from scratch.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Stitch Salwar Kameez.
- CO2: Construct Kalidar Kurta & Chudidar Pyjami.
- CO3: Create Basic Blouse and a Variation.
- CO4: Make a Trouser.
- CO5: Handle the construction of Jump Suit.

### **PRACTICAL EXERCISES**

#### **UNIT I**

##### **Salwar Kameez**

Drafting, Pattern cutting, Layout, fabric Cutting, Stitching and Finishing.

#### **UNIT II**

##### **Kalidar Kurta & Chudidar Pyjami**

Drafting, Pattern cutting, Layout, fabric Cutting, Stitching and Finishing.

#### **UNIT III**

##### **Basic Blouse**

Drafting, Pattern cutting, Layout, fabric Cutting, Stitching and Finishing.

**UNIT IV****Trousers**

Drafting, Pattern cutting, Layout, fabric Cutting, Stitching and Finishing.

**UNIT V****Jump Suit**

Drafting, Pattern cutting, Layout, fabric Cutting, Stitching and Finishing.

**RECOMMENDED BOOKS**

1. Pattern Designs for Fashion Design by Helen Joseph Armstrong published by Pearson.
2. Pattern Cutting for Lingerie beachwear and leisurewear by Ann Haggar published by Blackwell Publishing.
3. Complete guide to sewing by Reader Digest.
4. Fashion production terms by Debbie ann published by Fairchild.
5. Fashion Patternmaking Techniques: Haute Couture by Antonio Donnanno published by Promopress.

**RECOMMENDED WEBSITES**

1. <https://swayam.gov.in/>
2. [www.sewguide.com/](http://www.sewguide.com/)
3. [www.sewguide.com/types-of-skirts/](http://www.sewguide.com/types-of-skirts/)
4. [www.brainkart.com/article/Pattern-Layout-and-Types-of-Pattern-Layouts\\_35623/](http://www.brainkart.com/article/Pattern-Layout-and-Types-of-Pattern-Layouts_35623/)

**INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and contain five units of equal weightage.

## **5.4 FASHION SOURCING**

<b>L</b>	<b>P</b>
-	<b>10</b>

### **RATIONALE**

Fashion sourcing is very important for exposing the students to sources for fashion and its accessories. Fashion design students are expected to have an appreciation of different fabrics, colors and textures. This subject will help students to understand the concept of sourcing and marketing of fashion goods. Students will also get an insight about trade in fashion industry.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Select various types of fabrics available in local market.
- CO2: Handle various types of functional trims available in local market.
- CO3: Practice various types of decorative trims available in local market.
- CO4: Utilize various types of Packaging material and labels available in local market.
- CO5: Prepare the fashion catalog.

### **PRACTICAL EXERCISES**

#### **UNIT I**

##### **Sourcing of Fabrics**

Students are required to do a market survey in local market for various types of fabrics available and also collect the samples of the same.

#### **UNIT II**

##### **Sourcing of Functional Trims**

Students are required to do a market survey in local market for various types of functional trims like buttons, elastics, zipper, Velcro etc. available and also collect the samples of the same.

#### **UNIT III**

##### **Sourcing of Decorative Trims**

Students are required to do a market survey in local market for various types of decorative trims like

laces, braids, ribbon, stones, beads etc. available and also collect the samples of the same.

## UNIT IV

### Sourcing of Packaging material and Labels

Students are required to do a market survey in local market for various types of packaging material and labels available and also collect the samples of the same.

## UNIT V

### Catalog Preparation

Students are required to prepare a catalog using above collected samples of fabrics and trims.

## RECOMMENDED BOOKS

1. Sourcing and Selecting Textiles for Fashion by Erin Cadigan.
2. Global Sourcing in the Textile and apparel Industry by Jung E.Ha Brookshire.
3. Basics Textile Design 01: Sourcing Ideas: Researching Colour, Surface, Structure, Texture, and Pattern by *Josephine Steed, Frances Stevenson*.

## RECOMMENDED WEBSITES

1. [www.masterclass.com/articles/28-types-of-fabrics-and-their-uses](http://www.masterclass.com/articles/28-types-of-fabrics-and-their-uses)
2. [www.textileapex.com/](http://www.textileapex.com/)
3. [www.textilelearner.net/different-types-of-trims-used-in-garments/](http://www.textilelearner.net/different-types-of-trims-used-in-garments/)
4. [www.sewguide.com/fabric-trims/](http://www.sewguide.com/fabric-trims/)

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject and contain five units of equal weightage.

**5.5 PROGRAMME ELECTIVE - I****5.5.1 HOME FASHION**

<b>L</b>	<b>P</b>
2	2

**RATIONALE**

The knowledge related to home fashion is essential for the fashion design students at this level. This subject will help the students in developing related understanding and skills for bed linen, kitchen linen, bath linen, upholstery, floor covering and curtains. It will further help the students to understand the concept of home fashion goods.

**COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Utilize various Home Fashion products.
- CO2: Explain the various categories of Bed Linen.
- CO3: Handle various Upholstery Fabrics.
- CO4: Describe the types of Floor Covering.
- CO5: Learn about various types of Curtains.

**DETAILED CONTENTS****UNIT 1****Home Fashion**

Home Fashion- Introduction to home fashion range, Classification of various Home Fashion products like Bed Linen, Kitchen linen, Bath Linen, Upholstery, Floor Covering and Curtains.

**UNIT 2****Bed Linen**

Introduction to Bed Linen, classification of Bed Linen, Types of Fabrics used in Bed Linen, Choosing the Right Bed Linen Fabric, Care and Maintenance of Bed Linen.

**UNIT 3****Upholstery Fabric**

Understanding the characteristics of Upholstery Fabrics, Types of Upholstery Fabrics, Choosing the Right Upholstery Fabric, Commonly Used Upholstery Fabrics, Care and Maintenance of Upholstery.

**UNIT 4****Floor Covering**

Understanding Floor Covering, Types of Floor Covering, Choosing the Right Floor Covering, Care and Maintenance of Floor Covering.

**UNIT 5****Curtains**

Understanding Curtains, Types of Curtains, Choosing the Right Curtains, Care and Maintenance of Curtains.

**PRACTICAL EXERCISES**

1. Design two theme based bed linens.
2. Design two theme based bath linens.
3. Design two theme based kitchen linens.
4. Design two theme based upholstery.
5. Design two theme based floor covering.
6. Design two theme based curtains.

**RECOMMENDED BOOKS**

1. Home Furnishing by Dr. V. Ramesh Babu and S. Sundaresan.
2. Performance of Home Textiles by Subrata Das.
3. High Performance Technical Textiles Edited by Roshan Paul.
4. Textile Engineering – An Introduction Edited by Yasir Nawab.

**RECOMMENDED WEBSITES**

1. [www.textilelearner.net/home-textile-types-classification](http://www.textilelearner.net/home-textile-types-classification)
2. [www.textilevaluechain.in/news-insights/interiors-defined-home-textiles-categories](http://www.textilevaluechain.in/news-insights/interiors-defined-home-textiles-categories)
3. [www.textileapex.com/different-types-of-home-textiles](http://www.textileapex.com/different-types-of-home-textiles)

## **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills among the students. This subject contains five units of equal weightage.

## 5.5.2 SUSTAINABLE FASHION

<b>L</b>	<b>P</b>
2	2

### **RATIONALE**

The knowledge related to Sustainable Fashion is essential for the students in order to develop the understanding regarding saving environment and reducing carbon foot prints. This subject will help the students to understand the concept of ethical fashion goods. Students will also get an insight about eco initiatives in fashion industry.

### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Learn the fundamental of Sustainable Fashion.
- CO2: Explain the Sustainable Fashion Terminology.
- CO3: Differentiate the Types of Eco Fibers and Fabrics.
- CO4: Utilize the concept Eco Fashion.
- CO5: Handle the Fashion waste and up-cycling.

### **DETAILED CONTENTS**

#### **UNIT 1**

##### **Concept of Sustainable Fashion**

Sustainable Fashion- Introduction, Objective and its future scope, Importance steps to achieve the objective of sustainability of fashion.

#### **UNIT 2**

##### **Sustainable Fashion Terminology**

Eco sustainable fashion, Ethical Fashion, Vegan Fashion, Eco green, Carbon footprint, water foot prints, eco initiatives.

#### **UNIT 3**

##### **Eco Fibers and Fabrics**

Organic Cotton, Hemp, Bamboo, Linen, Organic Wool, Ahimsa Silk, Soy Silk, Eco Mark- Definition and types of Eco mark for Fabric: Silk mark Handloom Mark.

**UNIT 4****Eco Fashion**

Attributes of sustainable fashion, Eco Fashion labels- Origin, need and scope, Eco labeling- types and products covered.

**UNIT 5****Fashion waste and up-cycling**

Three R's of up-cycling- Reduce, Reuse and recycle, methods of up-cycling in Fashion, Fashion brands using recycled textile material, concept of Thrift stores.

**PRACTICAL EXERCISES**

1. Design a collection with theme eco fabrics.
2. Design a garment with up-cycling.
3. Design any accessories with up-cycling.
4. Collection of various Eco Labels.
5. Design a garment with recycling.
6. Design any accessories with recycling.

**RECOMMENDED BOOKS**

1. Consumed - The Need for Collective Change: Colonialism, Climate Change, and Consumerism *by Aja Barber*.
2. To Die For: Is Fashion Wearing Out the World? *by Lucy Siegle*.
3. The Conscious Closet: The Revolutionary Guide to Looking Good While Doing Good *by Elizabeth Cline*.

**RECOMMENDED WEBSITES**

1. [www.greendreamer.com/journal/what-is-sustainable-fashion](http://www.greendreamer.com/journal/what-is-sustainable-fashion).
2. [www.vogue.in/fashion/content/vogues-ultimate-guide-to-sustainable-fashion](http://www.vogue.in/fashion/content/vogues-ultimate-guide-to-sustainable-fashion).
3. [www.thevou.com/fashion/sustainable-fashion/](http://www.thevou.com/fashion/sustainable-fashion/)

**INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills among the students. This subject contains five units of equal weightage.

### 5.5.3 SMART TEXTILES

<b>L</b>	<b>P</b>
2	2

#### **RATIONALE**

Smart Textiles exposure is essential for the fashion design students at this level in order to develop the understanding regarding functional clothing. This subject will help the students to understand the concept of Smart textiles and various functional clothing prevailing in market. It will further give exposure of protective and medical – functional clothing.

#### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

CO1: Learn about Smart Textiles.

CO2: Differentiate various Smart Textiles products.

CO3: Explain various Functional Clothing.

CO4: Classify various Protective Clothing & Sports-functional clothing.

CO5: Describe Medical-functional clothing & Clothing for special needs.

#### **DETAILED CONTENTS**

#### **UNIT I**

##### **Introduction to Smart Textiles**

Key features of smart textiles, difference between traditional textiles and smart textiles, benefits of smart textiles.

#### **UNIT 2**

##### **Types of Smart Textile**

Types of smart textiles- Passive smart textiles, Active smart textiles, Ultra smart textiles, Materials are used in smart textiles Conductive fibers, Shape Memory Alloys (SMAs), Thermo sensitive and Photo sensitive material (Definition only).

#### **UNIT 3**

##### **Smart Functional Clothing**

Introduction to Functional Clothing, Different types of Functional clothing, use of specialty fibers

used in functional clothing.

## **UNIT 4**

### **Protective Clothing & Sports-functional clothing**

Introduction to Protective Clothing, Different types of Protective clothing, use of Protective clothing.

Introduction to Sports-functional clothing, Different types of Sports-functional clothing, use of Sports-functional clothing.

## **UNIT 5**

### **Medical-functional clothing & Clothing for special needs**

Introduction to Medical-functional clothing, Different types of Medical-functional clothing, use of Medical-functional clothing.

Introduction to Clothing for special needs, Different types of Clothing for special needs, use of Clothing for special needs.

## **PRACTICAL EXERCISES**

1. Design any protective functional clothing.
2. Design any of medical functional clothing.
3. Design any sports functional clothing.
4. Design any special need clothing.
5. Design any smart functional clothing.

## **RECOMMENDED BOOKS**

1. Functional Textiles and Clothing by Abhijit Majumdar.
2. Functional Clothing Design by Susan M. Watkins.
3. Functional Fashion for physically handicapped by Helen Cookman.

## **RECOMMENDED WEBSITES**

1. [www.textileblog.com/functional-clothing-buzzword-in-the-fashion-industry/#google\\_vignette](http://www.textileblog.com/functional-clothing-buzzword-in-the-fashion-industry/#google_vignette)
2. [www.textilelearner.net/functional-textiles-types-application/](http://www.textilelearner.net/functional-textiles-types-application/)

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3. [www.medium.com/@stitchdiary/functional-garments-when-garments-do-more-than-fashion-262d1ca7ef9f](http://www.medium.com/@stitchdiary/functional-garments-when-garments-do-more-than-fashion-262d1ca7ef9f)

## INSTRUCTIONAL STRATEGY

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills among the students. This subject contains five units of equal weightage.

**5.6 MULTIDISCIPLINARY ELECTIVE**

L	P
2	-

**RATIONALE**

Multidisciplinary electives are very important and play major role in implementation of National Education Policy. Multidisciplinary is a subject which is useful for two or more disciplines in which students are asked to understand the concept of multidisciplinary or interdisciplinary. It will help the students to gain an arsenal of skills that are easily transferable across work environments.

**COURSE OUTCOMES**

At the end of the open elective, the students will be able to:

- CO1: Apply critical thinking problem solving.
- CO2: Demonstrate self and time management.
- CO3: Display analytical and research abilities.
- CO4: Integrate multiple knowledge domains.
- CO5: Enhance the scope and depth of learning.

**LIST OF MULTIDISCIPLINARY ELECTIVES**

**(The list is indicative and not exhaustive)**

1. Introduction to Internet of Things
2. Introduction to Robotics
3. Introduction to Embedded System Design
4. Fundamentals of Artificial Intelligence
5. Digital Image Processing
6. Introduction to Machine Learning
7. Fundamentals of Artificial Intelligence
8. The Joy of Computing Using Python

- 
9. Cloud Computing
  10. Introduction to Industry 4.0
  11. Industrial Internet of Things
  12. Object Oriented System Development using UML, Java and Patterns

## **GUIDELINES**

Multidisciplinary Elective shall be offered preferably in online mode. Online mode multidisciplinary elective shall preferably be through Massive Open Online Courses (MOOCs) from Swayam, NPTEL, Upgrad, Udemy, Khan Academy or any other online portal to promote self-learning. A flexible basket of large number of multidisciplinary electives is suggested which can be modified depending upon the availability of courses at suggested portals and requirements. For online multidisciplinary electives, department coordinators shall be assigned to monitor and guide the group of students for selection of minimum 20 hours duration online course of their choice. For offline multidisciplinary electives, a suitable relevant subject shall be offered by the respective department to the students with minimum 40% of the total class strength as per present and future requirements.

Assessment of MOOCs multidisciplinary elective shall be based on continuous evaluation by the respective coordinator. The coordinator shall consider the submitted assignments by the students from time to time during the conduct of MOOCs. The MOOCs assessment shall be conducted by the coordinator along with one external expert by considering submitted assignments out of 100 marks.

In case, no suitable multidisciplinary elective is available online, only then the course may be conducted in offline mode. The assessment of offline multidisciplinary elective shall be internal and external. The offline multidisciplinary elective internal assessment of 40 marks shall be based on internal sessional tests, assignments etc. and external assessment of 60 marks shall be based on external examination at institute level.

## **RECOMMENDED WEBSITES**

1. <https://swayam.gov.in/>
2. <https://www.udemy.com/>
3. <https://www.upgrad.com/>
4. <https://www.khanacademy.org/>

## SIXTH SEMESTER

6.1	Fabric Designing	116-117
6.2	Entrepreneurship Development & Management	118-120
6.3	Portfolio using CAD	121-122
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6.5	Major Project/Industrial Internship	130-131

## 6.1 FABRIC DESIGNING

<b>L</b>	<b>P</b>
-	<b>6</b>

### RATIONALE

Fabric design skills are essential at this level for developing the understanding in students to create a fabric design using different types of prints and also in different arrangements. The knowledge of fabric surface designing helps the students in rendering any print design for specific textile and apparel products.

### COURSE OUTCOMES

After undergoing the course, the students will be able to:

- CO1: Develop different motifs by using printing.
- CO2: Place motif in repeat pattern.
- CO3: Create print as per trend forecast.
- CO4: Generate self-designs in the fabrics
- CO5: Design fabrics for home fashion and apparels

### PRACTICAL EXERCISES

1. Sheet demonstrating floral motifs
2. Sheet demonstrating traditional motifs
3. Sheet demonstrating Geometrical motifs
4. Sheet demonstrating Abstract motifs
5. Sheet demonstrating Realistic motifs
6. Sheet demonstrating Calligraphic motifs
7. Sheet demonstrating Full drop/block pattern repeat
8. Sheet demonstrating Diamond pattern repeat
9. Sheet demonstrating Half drop pattern repeat
10. Sheet demonstrating Brick pattern repeat
11. Sheet demonstrating Ogee pattern repeat
12. Sheet demonstrating Tossed/random pattern repeat
13. Sheet demonstrating Stripe pattern repeat
14. Rendering of a printed textile designs

15. Rendering of a woven textile designs
16. Rendering of a mixed media textile designs
17. Rendering prints on the surface Cushion Covers, Pillow covers, Table Covers, Curtains, Garments, Bags, Trousers, Shirts, Women's suit and Saree (two each)

### **RECOMMENDED BOOKS**

1. Textile Print Design by Richard Fisher & Dorothy Wolfthal 1987, Fair Child Publications .
2. The Complete Guide to Designing and Printing Fabric by Laurie Wisbrun.
3. The Complete Guide to Designing and Printing Fabric, K.Platt.
4. How to draw what you seen by Rudy De Reyna.
5. Photography and Render with V-Ray.
6. Abstract and Floral Design E. A. Seguy.
7. Wastons' Textile Design & Colour Z. Grosicki.
8. Grammer of Textile Design Nisbet.
9. Structural Fabric Design Kilby.
10. Sketching: Drawing Techniques for Product designers. By koos Eissen ,Roselien Steur.
11. Rendering in Pen &Ink by Arthur L. Guptill, Susan E. Meyer).

### **RECOMMENDED WEBSITES**

1. <https://www.textileindustry.net/types-of-motifs-in-textile-design-and-fashion/>
2. <https://fashionous.in/blogs/knowledge-corner/motifs-used-in-indian-textiles>
3. <https://textilelearner.net/study-of-motif-and-pattern-and-their-differences/>
4. <https://patternanddesign.com/7-most-common-surface-pattern-repeats/>
5. <https://textilelearner.net/textile-design-types-importance/>

### **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and contains five units of equal weightage.

## 6.2 ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT

L	P
3	-

### RATIONALE

In the present day scenario, it has become imperative to impart entrepreneurship and management concepts to students so that a significant percentage of them can be directed towards setting up and managing their own small enterprises. This subject focuses on imparting the necessary competencies and skills of enterprise set up and its management.

### COURSE OUTCOMES

After undergoing the subject, the students will be able to:

- CO1: Comprehend the importance of entrepreneurship and its role in nation's development.
- CO2: Classify the various types of business and business organizations.
- CO3: Identify the various resources / sources and / or schemes for starting a new venture.
- CO4: Explain the principles of management including its functions in an organisation.
- CO5: Conduct market survey and prepare project report.

### DETAILED CONTENTS

#### UNIT I

Entrepreneurship: Concept and definitions, classification and types of entrepreneurs, entrepreneurial competencies, Traits / Qualities of entrepreneurs, manager v/s entrepreneur, role of Entrepreneur, barriers in entrepreneurship, Sole proprietorship and partnership forms of business organisations, small business vs startup, critical components for establishing a start-up, Leadership: Definition and Need, Manager Vs leader, Types of leadership

#### UNIT II

Definition of MSME (micro, small and medium enterprises), significant provisions of MSME Act, importance of feasibility studies, technical, marketing and finance related problems faced by new enterprises, major labor issues in MSMEs and its related laws, Obtaining financial assistance through various government schemes like Prime Minister Employment Generation Program (PMEGP) Pradhan Mantri Mudra Yogna (PMMY) , Make in India, Start up India, Stand up India , National Urban

Livelihood Mission (NULM); Schemes of assistance by entrepreneurial support agencies at National, State, District level: NSIC, NRDC, DC:MSME, SIDBI, NABARD, Commercial Banks, SFC's TCO, KVIB, DIC, Technology Business Incubator (TBI) and Science and Technology Entrepreneur Parks (STEP).

### **UNIT III**

**NATURE AND FUNCTIONS OF MANAGEMENT:** Definition, Nature of Management, Management as a Process, Management as Science and Art, Management Functions, Management and Administration, Managerial Skills, Levels of Management; Leadership.

**PLANNING AND DECISION MAKING:** Planning and Forecasting - Meaning and definition, Features, Steps in Planning Process, Approaches, Principles, Importance, Advantages and Disadvantages of Planning, Types of Plans, Types of Planning, Management by Objective. Decision Making-Meaning, Characteristics.

### **UNIT IV**

**ORGANISING AND ORGANISATION STRUCTURE:** Organizing Process - Meaning and Definition, Characteristics Process, Need and Importance, Principles, Span of Management, Organisational Chart - Types, Contents, Uses, Limitations, Factors Affecting Organisational Chart.

**STAFFING:** Meaning, Nature, Importance, Staffing process. Manpower Planning, Recruitment, Selection, Orientation and Placement, Training, Remuneration.

**CONTROLLING AND CO-ORDINATION** Controlling - Meaning, Features, Importance, Control Process, Characteristics of an effective control system, Types of Control. Co-ordination - characteristics, essentials.

### **UNIT V**

Market Survey and Opportunity Identification, Scanning of business environment, Assessment of demand and supply in potential areas of growth, Project report Preparation, Detailed project report including technical, economic and market feasibility, Common errors in project report preparations, Exercises on preparation of project report.

### **RECOMMENDED BOOKS**

1. BS Rathore and Dr JS Saini, "A Handbook of Entrepreneurship", Aapga Publications, Panchkula (Haryana).
2. Entrepreneurship Development, Tata McGraw Hill Publishing Company Ltd., New Delhi.

3. CB Gupta and P Srinivasan, "Entrepreneurship Development in India", Sultan Chand and Sons, New Delhi.
4. Poornima M Charantimath, "Entrepreneurship Development - Small Business Enterprises", Pearson Education, New Delhi.
5. David H Holt, "Entrepreneurship: New Venture Creation", Prentice Hall of India Pvt. Ltd., New Delhi.
6. PM Bhandari, "Handbook of Small Scale Industry".
7. L M Prasad, "Principles and Practice of Management", Sultan Chand & Sons, New Delhi.

## SUGGESTED WEBSITES

1. <https://ipindia.gov.in/>

## INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. The teacher will discuss stories and case studies with students, which in turn will develop appropriate managerial and entrepreneurial qualities in the students. In addition, expert lecturers may also be arranged from outside experts and students may be taken to nearby industrial organizations on visit. Approach extracted reading and handouts may be provided. In addition, different activities like conduct of entrepreneurship awareness camp extension lecturers by outside experts, interactions sessions with entrepreneurs and industrial visits may also be organized. This subject contains five units of equal weightage.

## 6.3 PORTFOLIO USING CAD

L	P
-	<b>6</b>

### RATIONALE

Portfolio presentation provides a challenging platform for the students to demonstrate their analytical skills necessary for fashion designing. The fashion design students at this level should be able to design a catalogue depending on various design themes for boutiques and domestic markets and areas of their interest using CAD.

### COURSE OUTCOMES

After undergoing the subject, the students will be able to:

- CO1: Design a collection inspired by any folk art digitally.
- CO2: Handle the process of designing a collection inspired by nature digitally.
- CO3: Develop and design a collection inspired by any festival digitally
- CO4: Prepare a design of collection inspired by any architecture digitally.
- CO5: Create a design of collection inspired by fusion digitally.

### PRACTICAL EXERCISES

#### UNIT I

##### Folk Art

Preparation of Theme based mood board, color and fabric board, design development sheet, final sketch, Flat spec, co-coordinating accessory designs.

#### UNIT II

##### Nature

Preparation of Theme based mood board, color and fabric board, design development sheet, final sketch, Flat spec, co-coordinating accessory designs.

#### UNIT III

##### Festival

Preparation of Theme based mood board, color and fabric board, design development sheet, final

sketch, Flat spec, co-coordinating accessory designs.

## **UNIT IV**

### **Architecture**

Preparation of Theme based mood board, color and fabric board, design development sheet, final sketch, Flat spec, co-coordinating accessory designs.

## **UNIT V**

### **Fusion**

Preparation of Theme based mood board, color and fabric board, design development sheet, final sketch, Flat spec, co-coordinating accessory designs.

## **RECOMMENDED BOOKS**

1. Fashion Portfolio by Anna Kiper.
2. Portfolio Presentation for fashion designers by Linda Tain.
3. Portfolio for fashion designers by Kathryn Hagen.

## **RECOMMENDED WEBSITES**

1. [www.behance.net/search/projects/fashion%20design%20portfolio](http://www.behance.net/search/projects/fashion%20design%20portfolio).
2. [www.wikihow.com/Prepare-a-Fashion-Design-Portfolio](http://www.wikihow.com/Prepare-a-Fashion-Design-Portfolio).
3. [www.peniya.com/articles/what-is-an-inspiration-board-in-fashion-2/1337](http://www.peniya.com/articles/what-is-an-inspiration-board-in-fashion-2/1337).

## **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and contains five units of equal weightage.

**6.4 PROGRAMME ELECTIVE - II****6.4.1 FOOTWEAR DESIGNING**

<b>L</b>	<b>P</b>
2	2

**RATIONALE**

The knowledge related Footwear Designing is essential for the fashion design students in order to develop the understanding regarding fundamentals of footwear- functions, types, sizing etc. This subject will help the students to achieve a creative expression, innovate and make a lasting impact on the footwear industry.

**COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Differentiate various styles of footwear.
- CO2: Explain the anatomy of human foot.
- CO3: Handle and classify the parts of footwear
- CO4: Describe the various foot sizing systems.
- CO5: Learn and design a footwear

**DETAILED CONTENTS****UNIT I****Fundamentals of Footwear**

Introduction to footwear, functions of footwear, History of footwear, Basic type of Footwear.

**UNIT 2****ANATOMY OF FOOT**

Foot anatomy and disease related to foot, Foot abnormalities.

**UNIT 3****ANATOMY OF FOOTWEAR**

Parts of footwear, Tools and equipment used in footwear making, Material, accessories and grimeries used in footwear.

**UNIT 4****FOOTWEAR SIZING**

Foot measurement, Measurement devices, Shoe last and foot, Shoe Sizing system, Conversion between different shoe sizing, Girth measurement fitting of shoes.

**UNIT 5****FOOTWEAR DESIGNING**

Footwear designing- mood board, color and material board, design development sheet, final sketch, technical drawing/ tech pack.

**PRACTICALS EXERCISES**

1. Designing a casual footwear for Boys/Girls.
2. Designing a casual footwear for Men/Women.
3. Designing a formal footwear for Boys/Girls.
4. Designing a formal footwear for Men/Women.
5. Designing a Party wear footwear for Boys/Girls.
6. Designing a Party wear footwear for Men/Women.
7. Design a theme based range for kids.

**RECOMMENDED BOOKS**

1. Handbook of footwear design and manufacture by Dr. A. Luximon, Published by Elsevier Sciences, 2021.
2. Comprehensive Footwear Technology By S. N Ganguly.
3. Manual of shoe making – clarks ltd.
4. ABC of Footwear Technology by Varun Gupta.

**RECOMMENDED WEBSITES**

1. [www.shoemakersacademy.com/shoe-development-process/](http://www.shoemakersacademy.com/shoe-development-process/)
2. [www.bettershoes.org/home/design-process](http://www.bettershoes.org/home/design-process)
3. [www.shoptribeindia.com/step-by-step-guide-to-designing-a-shoe/](http://www.shoptribeindia.com/step-by-step-guide-to-designing-a-shoe/)

**INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weight age.

**6.4.2 LEATHER DESIGNING**

<b>L</b>	<b>P</b>
2	2

**RATIONALE**

Leather Designing skills are essential for the students in order to develop the understanding regarding fundamentals of leather- types, characteristics and properties etc. This subject will help the students to achieve a creative expression, innovate and will make a lasting impact on the leather industry.

**COURSE OUTCOMES**

After undergoing this course, the learners will be able to:

- CO1: Differentiate various types of leather
- CO2: Explain the processing of leather
- CO3: Classify the leather goods
- CO4: Describe and handle various tools and machinery used for leather goods
- CO5: Learn and design leather goods

**DETAILED CONTENTS****UNIT I****Fundamentals of Leather**

Leather- its types, Characteristics & Properties, Leather cutting and defects.

**UNIT 2****Processing of Leather**

Pre-tanning, tanning and post tanning processes

**UNIT 3****Classification of Leather goods**

Classification of leather goods based on utility - ladies bags, small leather goods, solid leather goods, fancy leather goods, belts, sports leather goods, Upholstery leather goods

Classification of leather goods based on method of manufacturing - cut edge articles, Turn edge articles, turn over edge articles, stiffened articles, molded articles, and Box work.

**UNIT 4****Tools and Machinery**

Cutting tools, various Carving and stamping tools, finishing tools various Punching tools used in leather goods making,

Introduction of Clicking machine, splitting machine, strap cutting machine, sewing Machine, skiving machine.

**UNIT 5****Leather Designing**

Leather designing- mood board, color and material board, design development sheet, final sketch, technical drawing/ tech pack.

**PRACTICAL EXERCISES**

1. Design a leather hand/ shoulder/ hobo bag for women.
2. Design a footwear for Men/Women.
3. Design a leather wallet for Men/Women.
4. Design leather couple passport/card holders.
5. Design any leather accessories for men.
6. Design any leather accessories for women.

**RECOMMENDED BOOKS**

1. A Comprehensive Guide for Advanced Leather Goods Designing by Durairaj Dhanapal.
2. Leather in Fashion Designing by Anita Tyagi.
3. Handmade leather bags and accessories by Elean Ho.

**RECOMMENDED WEBSITES**

1. [www.britannica.com/topic/leather](http://www.britannica.com/topic/leather)
2. [www.deskera.com/blog/what-are-the-different-types-of-leather-and-their-uses/](http://www.deskera.com/blog/what-are-the-different-types-of-leather-and-their-uses/)
3. [www.fabricresource.com/houston/benefits-leather-interior-design/](http://www.fabricresource.com/houston/benefits-leather-interior-design/)

**INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weight age.

### 6.4.3. JEWELRY DESIGNING

<b>L</b>	<b>P</b>
2	2

#### **RATIONALE**

The knowledge related to jewelry designing at this level is very essential for the students of fashion design in order to develop the understanding regarding various types of jewelry articles available in market. This subject will help the students to understand the concept of designing jewelry as per market demand.

#### **COURSE OUTCOMES**

After undergoing the subject, the students will be able to:

- CO1: Learn about the fundamentals of jewelry designing
- CO2: Differentiate various Indian jewelry articles
- CO3: Explain the basics of jewelry items
- CO4: Classify various types of diamond and pearls
- CO5: Describe various gems and metals

#### **DETAILED CONTENTS**

##### **UNIT 1**

##### **Fundamentals of Jewelry Designing**

Introduction Jewelry Designing, Key features of jewelry - Beauty, Durability and Comfort, types of jewelry, Jewelry Terminology related to- neckwear, Pendant, earring, bracelet, ring and other accessories.

##### **UNIT 2**

##### **Indian Jewelry**

The origin and growth of jewelry in India, Types of Indian jewelry, Significances of Indian jewelry articles.

**UNIT 3****Rings, Earrings and Neckwear**

**Rings-** Anatomy of ring, ring styles, ring size reference.

**Earring-** Styles of earring, components of earring

**Neck wear-** Neckwear styles, Bail styles, Pendant styles, Chain styles, Clasp assembly, clasp styles

**UNIT 4****Diamonds, Pearls and Gems**

**Diamonds-** Anatomy of Diamond, 4 c's- cut, carat, clarity and color, size chart.

**Pearl-** Etymology- Fresh water and salt water pearls and farming natural pearls- Imitation pearls.

Origin of Natural pearl – different and naturally colored pearls – identification of duplicate pearls.

**Gems-** Introduction, Characteristics and classification of gemstones, Gemstone settings.

**UNIT 5****Material**

**Metals-** Properties and classification of metals, Metal textures, Forms of metal decoration, alloy, hallmarking.

**Non-conventional:** fabric, wood, terracotta, plastic, shells.

**PRACTICAL EXERCISES**

1. Design a theme based range of rings.
2. Design a theme based range of earrings.
3. Design a theme based range of pendent.
4. Design a theme based range of brooch.
5. Design a theme based range of neckwear.
6. Design a theme based range of bracelet.
7. Design a theme based range of bangles.

**RECOMMENDED BOOKS**

1. Research into Design: Supporting Sustainable Product Development, Amaresh Chakrabarti, Research Publishing Service, 2011.

2. Re-Use-The Art and Politics of Integration and Anxiety, Julia A. B. Hegewald, Subrata K. Mitra, SAGE Publications India, 2012.  
Let's know Handicrafts of India,Amar Tyagi,star publications, 2008.
3. Gemstones (Collins Gem), Cally Oldershaw, HarperCollins UK, 2013.

## **RECOMMENDED WEBSITES**

1. [www.aif.org/wp-content/uploads/2018/10/Jewelry-Design-Training-Module-2018a\\_MAST.pdf](http://www.aif.org/wp-content/uploads/2018/10/Jewelry-Design-Training-Module-2018a_MAST.pdf)
2. [www.stuller.com/basicsofjewelry](http://www.stuller.com/basicsofjewelry)
3. [www.gjsci.org/handbook-pdfs/PH\\_English\\_Jewellery%20Designer%20CAD\\_G&JQ2303\\_V3.pdf](http://www.gjsci.org/handbook-pdfs/PH_English_Jewellery%20Designer%20CAD_G&JQ2303_V3.pdf)
4. [www.ncert.nic.in/textbook/pdf/kehc105.pdf](http://www.ncert.nic.in/textbook/pdf/kehc105.pdf)

## **INSTRUCTIONAL STRATEGY**

This is hands on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weight age

## **6.5 MAJOR PROJECT/INDUSTRIAL TRAINING**

<b>L</b>	<b>P</b>
-	<b>16</b>

### **RATIONALE**

Major project/Industrial Training work will help in developing the relevant skills among the students as per National Skill Qualification Framework. It aims at exposing the students to the present and future needs of various relevant industries. It is expected from the students to get acquainted with desired attributes for industrial environment. For this purpose, students are required to be involved in industrial training / Major Project Work in different establishments.

### **COURSE OUTCOMES**

After undergoing this course, the students will be able to:

- CO1: Define the problem statement of the Industrial training / Major project according to the need of industry.
- CO2: Work as a team member for successful completion of Industrial training / Major project.
- CO3: Write the Internship / Major project report effectively.
- CO4: Present the Internship / Major project report using PPT.

### **GUIDELINES**

Depending upon the interest of the students, they can go for Industrial training / Major project as per present and future demand of the industry. The supervisors may guide the students to identify their project work and chalk out their plan of action well in advance. As an Industrial training / Major project activity each student is supposed to study the operations at site and prepare a detailed project report of the observations/processes/activities. The supervisor may create a group of 4-5 students as per their interest to work as a team for successful completion of the Industrial training / Major Project.

The supervisor shall evaluate the students along with one external industry / academic expert by considering the following parameters:

	<b>Parameter</b>	<b>Weightage</b>
I	Defining problem statement, focus and approach	20%
ii	Innovation / creativity	20%
iii	Report Writing	20%
iv	Power Point Presentation	20%
v	Viva - voce	20%

## 24. ASSESSMENT TOOLS AND CRITERION

The assessment is carried out by conducting:

1. Formative assessments
2. Summative assessments

### 1. FORMATIVE ASSESSMENT

The formative assessment will be evaluated on the basis of the internal assessments for theory subjects and practical by the concerned teachers for evaluating the knowledge and skill acquired by students and the behavioral transformation of the students. This internal assessment is primarily carried out by collecting evidence of competence gained by the students by evaluating them at work based on assessment criteria, asking questions and initiating formative discussions to assess understanding and by evaluating records and reports, and sessional marks are awarded to them.

### 2. SUMMATIVE ASSESSMENT

The summative assessment will include end semester examination for theory part for each candidate and practical examination with viva voce. Each Performance Criteria will be assigned marks proportional to its importance and proportion of marks for Theory and Skills Practical for each subject should be laid down. The following assessment tools are used for effective student evaluation:

1. Theory
2. Practical
3. Minor & Major Project
4. Massive Open Online Courses (MOOCs)
5. Viva Voce
6. Industrial / In House Training
7. Professional Industrial Training

#### 1. Theory Assessment

Evaluation in theory aims at assessing students' understanding of concepts, principles and procedures related to a course/subject, and their ability to apply learnt principles and solve

problems.

The formative evaluation for theory subjects may be caused through

- i. Sessional /class-tests,
- ii. Quizzes,
- iii. Assignments,
- iv. Seminars / Presentations
- v. Attendance
- vi. Case Studies

For Summative evaluation of theory, the question paper may comprise of three sections.

- i. It should contain objective type question and multiple choice questions. The objective type items should be used to evaluate students' performance in knowledge, comprehension and at the most application domains only.
- ii. It should contain short answer questions.
- iii. Descriptive type questions, with some internal choice of the questions set may be given in this section

## **2. Practical Assessment**

Evaluation of students performance in practical work (Laboratory experiments, Workshop practical /field exercises) aims at assessing students ability to apply or practice the concepts, principles and procedures, manipulative skills, ability to observe and record, ability to interpret and draw conclusions and work related attitudes. This will comprise of a creation of mock environment, wherever applicable in the skill lab which is equipped with all required equipment for development of desired skills. Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. will be ascertained by observation and will be marked in observation checklist along with the assessment of Job carried out in labs and maintenance of Lab Record Files.

Formative and summative evaluation may comprise of weight ages to performance on task, quality of product, general behavior and it should be followed by viva-voce of the

relevant subject. The end product will be measured against the specified dimensions and standards to gauge the level of skill achievements

### **3. Minor and Major Project Assessment**

The purpose of evaluation of project work is to assess student's ability to apply, in an integrated manner, knowledge and skills in solving real life problems, manipulative skills, ability to observe, record, creativity and communication skills. The project work assigned should be of relevance to the core skill, state of the art topics and the project areas that are pertaining to enhance job skill and enhance occupational opportunities. For both, minor and major project, Formative and summative evaluation may comprise of weight ages to performance on task, quality of product, nature and relevance of project and general behavior.

The formative assessment should include the continuous assessment based on the work allocated and mid semester viva voice or presentation. The final assessment will be the combination of the project undertaken, report submission and should be followed by viva-voce of the relevant subject.

In case of the assessment of this component, the team of examiners should be constituted and half of the examiners in the team should be invited from outside of the institute as expert for conducting the examination.

### **4. Massive Open Online Courses (MOOCs) Assessment**

Open Elective and Multi-Disciplinary Elective may be covered through Massive Open Online Courses (MOOCs) to promote self learning. These platforms promise open, online courses to massive numbers of students as they are free to join; they provide a wide range of courses. They allow for space and time flexibility and their participants can benefit from various online communication tools and access to quality content.

The coordinating Department/Centre/Office shall monitor every student to adopt the courses online of their choice and preference on Swayam portal. The duration of courses will vary depending on the level and credit points. Courses offered in the duration of 4-10 weeks for 2 to 3 credits at diploma level are to be opted. Students can get a certificate after registering and attending the classes and submitting the assignments/quizzes and qualifying nationwide conducted written exam.

On successful completion of each course, the institution offering the MOOCs course would issue the certificate, along with the number of credits and grades, through which the student can get credits transferred into his marks certificate issued by the parent institution. There may be standard norms for the host Institution to conduct the course that may include continuous evaluation through assignments, online quizzes, case studies, online writing exercises, term examinations, student feedback, online forum management, etc. The coordinating Department/Centre/Office of the respective department shall monitor every student and submit to the Office of Examinations, a score sheet before the close of the even semester.

## **5. Viva Voce Assessment**

This tool will be used to assess the conceptual understanding and the behavioral aspects as regards the job role and the specific task at hand. It will also include questions on safety, quality, environment and equipment's etc. Ask questions on non-prescribed tasks to ensure that the learners have complete knowledge on the assessment

## **6. Industrial/In-house Training Assessment**

The two mandatory internships after First and Second Year of are to be assessed in 3<sup>rd</sup> and 5<sup>th</sup> semester subsequently. The training should be preferably done in the industry but can also be in house depending upon the stream and availability of resources in and around the institute. Faculty should be assigned each student and made responsible for the evaluation and assessment of the training. Formative assessment should be taken from the industry/institute/ department on the basis of performance, behavior and learning capabilities. Summative evaluation may comprise of weight ages on the basis of report submission / presentation followed by viva-voce of the relevant subject.

## **7. Professional Industrial Training Assessment**

Evaluation of professional industrial training report and viva-voce/ presentation aims at assessing students' understanding of industrial processes, practices in the industry/field and their ability to engage in activities related to problem-solving in industrial setting as well as understanding of application of learnt knowledge and skills in real life situation. Formative and summative evaluation may comprise of weight ages to performance on task, quality of product, general behavior and it should be followed by viva-voce of the relevant subject.

The formative assessment should include the evaluation from the employer where the student is doing his training in the ratio of 40:60. The final assessment will be the combination of the

employer assessment and evaluation by the faculty of the institute which shall include report submission/ presentation/ seminar followed by viva-voce of the relevant subject.

## **SGPA AND CGPA ASSESSMENT**

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

- i. The SGPA is the ratio of sum of the product of the number of credits with the marks scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$\text{SGPA (Si)} = \frac{\sum(Ci \times Gi)}{\sum Ci}$$

where Ci is the number of credits of the ith course and Gi is the marks scored by the student in the ith course.

- ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$\text{CGPA} = \frac{\sum(Ci \times Si)}{\sum Ci}$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

- iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

## 25. TEACHING LEARNING TOOLS FOR EFFECTIVE IMPLEMENTATION

For effective implementation of curriculum, the faculty and staff of institutions have to play a vital role in planning instructional experiences for the courses in four different environments viz. class-room, laboratory, library and field and execute them in right perspective. It is emphasized that only a proper mix of different teaching methods in all these places of instruction can bring the changes in students behaviour as stipulated in the curriculum document. It is important to understand curriculum document holistically and further be aware of intricacies of Teaching-Learning Tools for achieving curriculum objectives. Given below are certain recommendations which may help in carrying out teaching-learning effectively:

### PROGRAMME LEVEL RECOMMENDATIONS

1. Curriculum implementation takes place at programme, course and class-room level respectively and synchronization among them is required for its success. The first step towards achieving synchronization is to read curriculum document holistically and understand its rationale and philosophy.
2. An academic plan needs to be prepared at institute level. The Head of the institute has a great role to play in its dissemination and percolation up to grass-root level.
3. Heads of Department are required to prepare academic plan at department level referring to institutional academic plan.

### COURSE LEVEL RECOMMENDATIONS

Teachers are educational managers at class room level and their success in achieving course level objectives lies in using course plan and their judicious execution which is very important for the success of programme by achieving its objectives. Teachers are required to plan various instructional experiences viz. theory lecture, expert lectures, lab/workshop practical's, guided library exercises, field visits, study tours, camps etc. In addition, they have to carry out progressive assessment of theory, assignments, library, practical's and field experiences. Teachers are also required to do all these activities within a stipulated period which is made available to them in the academic plan at Board level. With the amount of time to their credit, it is essential for them to use it judiciously by planning all above activities properly and ensure

execution of the plan effectively. Following is the gist of suggestions for subject teachers for effective utilization of Teaching Learning Tools to achieve the course objectives:

1. Teachers need to ensure attainment of course outcomes so as to help the students achieve program outcomes and also meet the desired learning outcomes in five domains of NSQF i.e. Process, Professional knowledge, Professional skills, Core skills and Responsibility.
2. Teachers are required to prepare a course plan, taking into account number of weeks available and courses to be taught.
3. Teachers are required to prepare lesson plan for every theory class. This plan may comprise of contents to be covered, learning material for execution of a lesson plan.
4. Teachers are required to plan for expert lectures from field/industry. For this, necessary steps need to be taken such as planning in advance, identifying field experts, making correspondence to invite them, taking necessary budgetary approval etc.
5. Teachers are required to plan for guided library exercises by identification of course specific experience requirement, setting time, assessment, etc. The assignments and seminars can be thought of as terminal outcome of library experiences.
6. Concept based industrial/field visits may be planned and executed for such contents of course which are abstract in nature and no other requisite resources are readily available in institute to impart them effectively.
7. Lot of focus needs to be laid on skill development. There is need for planning practical experiences in right perspective. These slots in a course are the avenues to use problem based learning and experiential learning effectively. The development and use of lab manuals will enable the institutes to provide lab experiences effectively.
8. Emphasis should be laid on developing soft skills like communication skills, personality Development, self-learning, inter personal skills, problem solving, and creativity etc.
9. Where ever possible, it is essential to use activity based learning rather than relying on delivery based conventional teaching all the time. While teaching, the teacher should make extensive use of audio visual aids such as video films, power point presentations and IT tools.

10. Teachers may take an initiative in establishing liaison with industries and field organizations for imparting field experiences to the students.
11. To enhance digital learning, open electives and multi-disciplinary electives have been provided in the curriculum to be taken up in the form of MOOCs. For Open electives, some courses may be identified out of the prescribed list given in the curriculum keeping in mind the interest of students. Similarly, for multi-disciplinary electives, courses to be offered may be identified by considering their relevance and utility. Every year SWAYAM is notifying the list of courses which are going to be offered in forthcoming even and odd semester. The institute needs to select the courses that are offered on SWAYAM platform or any other online platform.
12. For effective implementation of Massive Open Online Courses (MOOCs), a faculty member in the department may be identified and given the responsibility to coordinate various activities related to MOOCs. The concerned faculty member will facilitate in registration of students for MOOCs. The faculty member will also be responsible for compiling the result of students on the completion of MOOCs and pass on the information to the concerned authority.
13. Flexibility has been provided in the curriculum for the students to choose a course related to the discipline as per their interest. For effective implementation of discipline-specific electives, the institute should identify some courses from the list of courses prescribed in the curriculum. The courses should be selected and offered keeping in mind the interest of students, infrastructure and expertise available in and around the institute related to the courses. Option for discipline-specific elective may be taken from students through a form and a course, with more than 10 students opting for it, may be run.
14. Students should be made aware about issues related to ecology and environment, safety, concern for wastage of energy and other resources etc.
15. Any relevant contents beyond the syllabus may be covered by the teacher or experts in extra time.
16. Minor project should be identified and allocated taking into consideration the inputs from industry stake-holders, and departmental faculty. The minor project work should be such

that it enhances the fundamental skill-sets of the students from industry perspective and subsequently helps them to handle major project.

17. For major project work, students may be given relevant and well thought out problems, which are purposeful and develop practical skills. This will help the students in developing creativity and confidence for their gainful employment.
18. A Project bank may be developed in consultation with related industry, research institutes and other relevant field organizations. It may be ensured that the students take up some live problems being faced by industry as part of project work.

## 26. LIST OF EXPERTS

1. Controller of Examination, Haryana State Board of Technical Education, Panchkula.
2. Controller of Administration & Finance, Haryana State Board of Technical Education, Panchkula.
3. Joint Secretary, Haryana State Board of Technical Education, Panchkula.
4. Deputy Secretary, Training & Placement, Haryana State Board of Technical Education, Panchkula.
5. Deputy Secretary, Examination, Haryana State Board of Technical Education, Panchkula.
6. Deputy Secretary, Academic, Haryana State Board of Technical Education, Panchkula.
7. Assistant Secretary, Academic, Haryana State Board of Technical Education, Panchkula.
8. Dr. Puneet Sood, Director, National Institute of Fashion Technology, Kannur.
9. Mr. Pramod Kumar, Associate Professor, Department of Fashion Design, National Institute of Fashion Design, Panchkula.
10. Ms. Shangrella MK, Assistant Professor, National Institute of Fashion Technology, Kannur.
11. Dr. Vishu Arora, Associate Professor, NIFT, Panchkula.
12. Mr. Balram Maurya, Manager, Marketing and Merchandising, Faridabad, Haryana.
13. Dr. Sandeep Sachan, Director, NIFT, Daman Due.
14. Dr. Sangeeta Dewan, Associate Professor, Govt. Home Science College, Chandigarh.
15. Ms. Radhika Sen, Creative Associate, Department of Fashion Design, Byju & Whitehatjr, Bangalore.
16. Mr. Naveen Bhutani, General Manager, Quality Department, Richa Global Exports Pvt. Ltd., Mansesar, Gurgaon

17. Mr. Manoj Kumar, Senior Merchandiser, Merchandising Department, Pearl Global Industry, Gurgaon.
18. Mr. Tarun Kumar, HoD, Department of Fashion Technology, Government Polytechnic, Hisar.
19. Mr. Mohit Juneja, Lecturer, Department of Fashion Technology, Government Polytechnic, Hisar.
20. Mr. Sunny Pannu, Senior Lecturer, Department of Fashion Technology, Government Polytechnic, Bhiwani.
21. Ms. Sonia, HoD, Department of Fashion Design, Government Polytechnic for Women, Faridabad.
22. Ms. Kavita, HoD, Department of Fashion Design, Government Polytechnic, Hisar.
23. Ms. Shruti Nigam, Founder, Department of Textile Design, Yellow Stitch, Mohali.
24. Smt. Pushpa Rani, Senior Lecturer, Applied Science Department, Government Polytechnic, Sonipat, Haryana.
25. Smt. Krishna Bhoria, Lecturer, Applied Science Department, Government Polytechnic, Ambala, Haryana.
26. Smt. Preetpal Kaur, Guest Faculty, Applied Science Department, Government Polytechnic, Ambala, Haryana.
27. Ms. Monika, Lecturer, Applied Science Department, Seth Jai Parkash Polytechnic, Damla, Haryana.
28. Dr Neena Sharma, English Department, MCM College, Chandigarh.
29. Dr. Vidhi Grover, Lecturer, Applied Science Department, Seth Jai Parkash Polytechnic, Damla.
30. Mr. Tavinder Singh, Lecturer, Applied Science Department, Government Polytechnic, Sirsa.

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31. Ms. Sunita Rani, Lecturer, Applied Science Department, Government Polytechnic, Ambala.
  32. Dr. KG Srinivasa, Professor CSE, IIIT-Naya Raipur.
  33. Dr. Rajesh Mehra, Professor and Head, Curriculum Development Centre, NITTTR, Chandigarh.
  34. Dr. AB Gupta, Professor and Head, Education & Educational Management Department, NITTTR, Chandigarh.
  35. Er. PK Singla, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.
  36. Dr. SK Gupta, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.
  37. Dr. Meenakshi Sood, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.

## 27. APPENDIX

Sr. No.	List of Equipment
1.	Drafting tables with soft Worsen Top
2.	Drafting scales
3.	Full size mirror
4.	Scissors and Shears
5.	Pattern punching machine
6.	Dress forms
7.	Display Cork Boards
8.	Single Needle Lock Stitch Sewing Machine
9.	Cutting Tables with felt top
10.	5 Thread Over lock machine
11.	Steam Irons and ironing table
12.	Flat Lock
13.	Button Hole Machine or Eyelet Button Hole Machine
14.	Button attaching Machine
15.	Double needle lock stitch machine
16.	Electric cutter (Straight knife and round Blade)
17.	Flat bed – Fusing machine
18.	Single needle chain stitch machine
19.	Notcher
20.	Rivet Attaching Machine
21.	Drawing Tables
22.	Computers
23.	Laser Printer Black & White and Color
24.	Software: MS office, Latest version Corel Draw, Adobe Photoshop, Lectra/GGT/Tuka technology/Reach Technology or any other Open Source software.
25.	Microscope
26.	Dye Bath
27.	Printing Table
28.	Printing Blocks
29.	Drafting tables with soft Worsen Top



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