

COURSE: FABRIC STRUCTURE AND DESIGN

CODE: 07ABSFR17211

CREDITS: 03

Unit: 1

Introduction to Fabric formation techniques. Woven, Knitted, Non-woven and other methods of fabric formation. General Characteristics of woven fabrics and their importance – count of yarn, fabric grain, Thread density, Fabric width, Fabric weight and selvages. Elements of woven design – weave repeat, draft and lifting plan, Weaving preparatory process- winding, warping, sizing, drawing and denting, Weft winding.

Unit:2

Introduction to Khadi, Handloom and power loom Fabrics. Classification of looms, the study of primary and secondary motions of the loom. 2.3 Principles of the Shuttleless loom- Multiple grippers, Rapier, Air jet, Waterjet looms. Advantages of unconventional looms over conventional looms.

Unit: 3

Introduction to elementary weaves – plain, warp rib, weft rib, and will, Modification of twills, satin & sateen weaves, their derivative. Application and end use. Introduction to dobby and jacquard mechanism, salient features, advantages and disadvantages, application and end uses. Brief study of salient features of honeycomb, huck a back, Extra threads, Warp and weft pile and Terry pile structures.

Unit: 4

Introduction to Knitting, warp knit & weft knit. Knitting - Advantages and disadvantages, application and end use. Other fabric formation techniques- Braiding, knotting and non-woven advantages and disadvantages, applications and end users.

COURSE NAME : APPAREL MACHINERIES

COURSE CODE: 07ABSFR17213

CREDITS: 03

UNIT 1: Introduction to Garment Industry machinery

Description and working of Single Needle Lock Stitch machine. Double Needle Lock Stitch machine. Over Lock machines, Flat Lock machine -Types and parts of sewing machine needles – Needle sizes.

UNIT 2: Sewing machine feed mechanisms:

Drop feed – Differential feed – Variable top feed combined with drop feed. Variable top feed combined with differential feed –Compound feed – Unison feed. Machine bed types: Flatbed - Cylinder bed - Post bed – Feed – off – the – arm – Applications. Details of stand, Table and motor for sewing machines. Types of work aid: Guides – Folders.

UNIT 3: Fabric cutting machines:

Study of the process sequence. Lay and marker planning. Study of methods of marker planning – Study of spreading methods. Introduction to garment cutting machines . Types of cutting machines and applications Detailed study on the straight knife, band Knife and round knife cutting machines. Brief study on notcher, drills & thread markers.

UNIT 4: Brief study on the computer controlled cutting machine.

Laser and Plasma cutting. A brief study on safety stitching, blind stitching, button stitching. Button holing, placket making and bar-tacking machines. Study on various garment finishing machines uses for Fusing, Sucking, Ironing and Packing. Embroidery machines-brief study.

COURSE: FASHION ILLUSTRATION

CODE: 07ABSFR17212

CREDITS: 03

Unit 1: Fashion Illustration

Introduction to Fashion Illustration. Brief history of fashion illustration. Fashion cycle.

Unit 2: Fashion theories

Origins of fashion and clothing theories, effects of world war on clothing. Clothing as modesty, protection, status and religious symbol, Fashion as status symbol. The major fashion centres and Fashion theories. Fashion Psychology, role of clothing in physical, social, psychological and cultural scenario, Human behaviour and clothing, Clothing and gender differentiation.

Unit 3: Fashion Figure

Fashion Figure-study of various proportions, the balance line in drawing figures, gestures and movements. 8 head, 10 head, 12 head figures. Figure analysis, body types, designing for diverse body types and ages.

Unit 4: About Fashion designers

Fashion designers, history. Study of two well-known Fashion Illustrators. Design concepts of famous designers, both Indian and International.