

Syllabus For Khadi Yarn And Fabric Dyeing Assistant (RPL)

Course Name	Khadi Yarn And Fabric Dyeing Assistant (RPL)
Sector	TEXTILES & HANDLOOMS
Course Code	TXT/2024/KFDA/326
Level	4 (RPL)
Occupation	Khadi Yarn And Fabric Dyeing Assistant
Course Duration	Total Duration 60 Hrs (T- 20 , P-40)
Trainees' Entry Qualification	Class VIII Pass with 5 years experience in the relevant field
Trainers Qualification	Class VIII Pass 3 Years' experience in related field

SYLLABUS:**TOPIC: I) COTTON YARN AND COTTON CLOTH DYING****II) ORGANIC COLOUR**

Unit I: Definition of Khadi, Varieties of Khadi, Different Khadi products, Cotton yarn quality (Count, evenness, turns per inch, tensile strength and elongation), Fabric quality (Warp & weft, ends per inch, picks per inch, fabric GSM, Fabric strength, Fabric width, Fabric defects).

3 Hours

Unit II: De-sizing and scouring of cotton yarns and fabrics, Different bleaching techniques for cotton fabric bleaching, Advantages & Disadvantages, Different methods of drying: sun drying, hot air chamber drying.

2 Hours

Unit III: Classification of dyes based on their mode of application, Selection of classes/types of dyes depending on dye-fibre affinity and end use requirement, understanding the steps of dyeing process, dyeing cycles and basic calculations for dyeing. Methods of dyeing of cotton and silk yarns and fabrics with direct, acid, basic, reactive, sulphur, vat and natural dyestuff - Recipe and procedure only.

11 Hours

Unit IV: Understanding colour fastness of dyed cotton fabrics: colour fastness to wash, light and rubbing. Methods of determination of colour fastness to washing, rubbing.

2 Hours

Unit V: Definition of Organic Dyes, characteristics, Application on cotton and silk fabric, merits and demerits of organic dyes. Methods of dyeing cotton and silk yarn and fabric.

2 Hours

Practical (s):

40 Hours

- Desizing of cotton fabric with enzyme.
- Scouring of cotton yarn and fabric with caustic soda.
- Bleaching of cotton yarn and fabric with sodium hypochlorite
- Bleaching of cotton yarn and fabric with hydrogen peroxide.
- Degumming and desizing of silk fabric
- Dyeing of cotton yarn and fabric with direct dyes and reactive dyes.

- Dyeing of cotton yarn and fabric with Organic dyes.
- Dyeing of silk yarn and fabric with Organic dyes.
- Dyeing of cotton yarn and fabric with azoic dyes and sulphur dyes.
- Dyeing of silk with acid and metal complex dyes, exhaust dyeing with reactive dyes