



**Amravati University** 

Department of Lifelong Learning & Extension

Short Term Certificate Courses

# (3 Month)

# Syllabus

# For

# **Certificate Course in Textile Spinning**

# Unit -1:

# Introduction:

A) Importance of ginning. Bale storage, identification and management. Machine sequence in blow room, its function and controlling. Functioning of the condensers, Different signal lamps used in machines, knowing the different control buttons and operating them on need basis. Knowledge about humidity conditions in blow room.

## Unit-2:

## **Carding & Draw Frame Tenting:**

- A) Importance of carding, various parts in a card and their functions, Precautions to be taken while working, Knowledge about humidity conditions and the working of cards, Normal defects in card web and actions needed to correct them.
- B) Importance of draw frame, various parts in a draw frame and their functions, Precautions to be taken while working, Knowledge about humidity conditions and the working of cards, Normal defects in draw frame sliver and actions needed to correct them, Importance of cleanliness and personal safety.

#### Unit-3:

## **Speed Frame & Ring Frame Operation**

- A) Details of working of a speed frame, doffing the bobbins and restarting the machine, Importance of speed frames, taking the doff and the quality requirements, Precautions to be taken while running, doffing and restarting the machines, Importance of cleanliness and personal safety.
- B) Importance of ring frames & taking doff and precautions to be taking while working, Details of working of a Ringframe, Precautions to be taken while doffing and restarting the machines.

## Unit - IV:

## Automatic Winding & Yarn Packing

A) Importance and details of automatic winding machine. Knowledge about various faults and Stop motions. Importance of maintaining uniform tension all the time. Knowledge of yarn count, cone parameters, cone weight. Various types of knots and splices. Importance of length measurements in winding.

B) Details of packing cones in Cartons, the mandatory markings, Importance of Packing and the mandatory requirements, Importance of maintaining clean and good aesthetics of packing, Knowledge of color codification, Concepts of length measured cones and the tolerance for

# Unit - V:

### Safety, Security & Discipline

 A) Importance of cleanliness and personal safety, Fire fighting and First aid, Safety gadgets in aspinning factory, Precautions to be taken while working, importance of disciplines at work.

#### PRACTICALS

- 1) Understanding the Process and material flow in Textile mill
- 2) Understanding the importance of fibers, types of sliver, sliver hank, importance of sliver quality.
- 3) Understanding the importance of roving quality, types of yarn, yam count,
- 4) Understanding the functions of different machines in blow room department.
- 5) Understanding the importance and function of different signal lamps in blow room.
- 6) Understanding the different control buttons in blow room machines,
- 7) Understanding the functions and methodology equipments.
- 8) Understanding the types of contaminations and importance of segregating contaminations.

#### **Books Recommended :**

- 1. Process control in speed frame R. Senthil kumar
- 2. Practical guide to Ring Spining by- Werner Klin
- 3. Packaging Prototypes Edward Danison, Rechard Cawthroy
- 4. Industrial Safety by- Chetan Prakashan

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