

**AIMS**

To be able to develop knowledge, skill and attitude in the area of special garments production with special emphasis on:

- protective clothing and production of specialized garments.
- microbial production and medical Textile.
- water repellent clothing and proofing of garments.

**SHORT DESCRIPTION**

Protective clothing; Production of specialized garments; Microbial protections; Medical Textiles; Water repellent clothing; Proofing of garments; Water proofing; Fire proofing; Mildew Proofing; Moth Proofing.

**DETAIL DESCRIPTION****Theory:**

- 1. Understand the protective clothings.**
  1. Describe protective clothing.
  2. Define flame retardency property.
  3. Mention the classification of Textile fiber according to flame retardancy property.
  4. Describe burning cycle.
  5. Describe nomex, aramid, carbon and fibers.
  6. Describe flame retandeny of cotton, viscose and polyester.
  7. Describe fire fighter's suite.
- 2. Understand the production of specialized garments.**
  1. Describe the importance of specialized garments.
  2. Describe coal miners suite.
  3. Describe racing drivers suite.
  4. Describe NASA recommended suite.
- 3. Understand the anti microbial protection.**
  1. Describe importance for protection.
  2. Describe the mechanism of anti-microbial protection.
  3. Describe the application of anti-microbial protection.
- 4. Understand the medical Textile.**
  1. Define medical Textile.
  2. Describe the importance of medical Textile.

3. Identify the necessary for sterilization.
4. Mention the classification of medical Textile.
5. Describe the production procedure of different medical Textile.

**5. Understand the water repellent clothing.**

1. Describe different types of water repellent treatment on different fabrics.
2. Describe the technique of production of water repellent garments.
3. Discuss the comfortability parameters of water repellent garments.

**6. Understand the water proofing.**

1. Define water proofing.
2. Mention the purpose of water proofing.
3. Mention the types of water proofing.
4. Mention the typical recipe for water proofing.
5. Describe the process of water proofing.
6. Mention the uses of water proofing.

**7. Understand the fire proofing.**

1. Define fire proofing.
2. Describe the importance of fire proofing.
3. Mention the typical recipe for fire proofing.
4. Describe the process of fire proofing.
5. Mention the materials and chemicals used in fire proofing.
6. Uses of fire proofing.
7. Mention the properties of fire proofing agents.

**8. Understand the Mildew Proofing.**

1. Define Mildew Proofing.
2. Describe the purpose of Mildew Proofing.
3. Describe the process of Mildew Proofing.
4. Mention the uses of Mildew Proofing.

**9. Understand the Moth Proofing.**

1. Define Moth Proofing.
2. Describe the purpose of Moth Proofing.
3. Describe the Process of Moth Proofing.
4. Mention the uses of Moth Proofing.

**PRACTICAL:**

1. Determine flame relardency property of cotton fabric.
2. Determine water repellency property of cotton fabric.
3. Determine the specification of different medical Textile product.

4. Apply the water repellent agent on cotton or synthetic fabric to make water repellent products.
5. Apply the fire Proofing agent on cotton or synthetic fabric to make fire Proofing repellent products.
6. Apply the Mildew and Moth Proofing agent on cotton or synthetic fabric to make Moth Proofing products.