



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – May 2025 II Semester

Class : I P.G.
Major : Textiles and Fashion Apparel

Time: 3 Hours
Max. Marks: 100

23MTFC09 Sustainable Textiles and Fashion

Course Outcomes:

CO1: Describe the need for sustainable textile and fashion

CO2: Use the methods of sustainable textile and fashion production.

CO3: Relate fashion design process and fashion consumption/ trend with sustainability.

CO4: Select sustainable textile design and processing methods.

CO5: Develop sustainable fashion product.

Part A

10 x 1 = 10

Choose the Correct Answer

1. What is the primary focus of sustainable textiles and fashion? CO1K1
a. Cost reduction b. Market competition
c. Environmental sustainability d. Innovation and aesthetics
2. Which concept emphasizes reducing waste in textile sectors? CO1K2
a. Nega demand b. Recycle, and reuse c. Textile logistics d. Fast fashion
3. Recognize the key environmental driver in the textile industry? CO2K1
a. Eco-labels b. Outsourcing c. Fast production d. Consumer spending
4. What is a critical component of sustainable clothing care? CO2K1
a. Frequent washing b. Use of synthetic detergents
c. Lower washing temperatures d. Quick-drying fabrics
5. Which technique uses enzymes for textile processing? CO3K1
a. Controlled coloration b. Bio-processing c. Nano-dyeing d. Peroxide bleaching
6. How does bio-polishing enhance textiles? CO3K1
a. Reduces colour fading b. Improves surface smoothness
c. Increases weight d. Inhibits biodegradability
7. Recognize the role of fashion designers in sustainable fashion CO4K1
a. Maximize production speed b. Implement zero-waste design practices
c. Enhance product aesthetics d. Increase consumer spending
8. Which of the following relates to reversing fashion consumption? CO4K1
a. Overproduction b. Fast fashion c. Redesigning and upcycling d. High-volume retailing
9. Which is an example of a sustainable fashion supply chain strategy? CO5K1
a. Fast fashion b. Sharing and servicing c. Synthetic dyeing d. High-volume imports
10. Nega demand in sustainable fashion leads to CO5K2
a. Increasing consumption b. Decreasing unnecessary demand
c. Promoting high-cost production d. Enhancing aesthetic value

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

11.a. Explain the importance of the reduce, recycle, and reuse concepts in sustainable textiles. CO1K2

(or)

11.b. Discuss the global scenario of textile recycling and its significance. CO1K2

12.a. Describe the role of eco-labels in the textile industry. CO2K2

(or)

12.b. Discuss about the sustainable factors in yarn and fabric manufacturing. CO2K3

13.a. Write a note on enzymatic degumming. CO3K5

(or)

13.b. Discuss the use of natural colorants in textile processing. CO3K3

14.a. Explain the significance of zero-waste design practices in fashion. CO4K3

(or)

14.b. Discuss the role of fashion designers in sustainable clothing. CO4K4

15.a. Explain the concept of nega demand in sustainable fashion. CO5K2

(or)

15.b. Analyze the role of fashion logistics in sustainability. CO5K4

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

16.a. Evaluate the need for sustainability and discuss about customer attitude. CO1K5

(or)

16.b. Discuss about the market for sustainable textiles and fashion products. CO1K3

17.a. Evaluate the environmental drivers affecting sustainability in textile production. CO2K5

(or)

17.b. Create a sustainable strategy for waste management in the spinning and fabric manufacturing. CO2K4

18.a. Outline the bio-processing techniques used in sustainable textile production. CO3K3

(or)

18.b. Develop a framework for integrating natural finishing in commercial production. CO3K5

19.a. Analyze the sustainable strategies in the fashion design and production process? CO4K4

(or)

19.b. Design a case study on the benefits of second-hand clothing in sustainable fashion. CO4K6

20.a. Compare and contrast the impact of fast fashion and slow fashion on sustainability. CO5K4

(or)

20.b. Evaluate the role of sustainable fashion supply chains in reducing carbon footprints. CO5K5
