



## Avinashilingam Institute for Home Science and Higher Education for Women

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

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

### Master's Degree Examination – June / July 2021

#### II Semester

Class : I PG  
Major : Bio textiles

Time : 3 Hours  
Max. Marks: 100

#### 20MBXC07 Functional textiles

##### Part A

10 x 1 = 10

##### Choose the Correct Answer

- Textiles with integrated functions of controlling or adjusting according to its application area is known as  
a. Geo textiles  
b. Industrial textile  
c. Functional textile  
d. Automobile textile  
CO1K1
- Identify the fiber commonly used in functional textile  
a. Cotton  
b. Jute  
c. Kevlar  
d. Polyester  
CO1K1
- Quote the fibre most commonly used for agro textiles is  
a. Polyolefin  
b. Polypropylene  
c. Modacrylic  
d. Polyester  
CO2K1
- Which fiber is durable, absorbent and can be boiled for the purpose of cleaning, and ensuring hygiene  
a. Acrylic  
b. Polyester  
c. Linen  
d. Polyolefin  
CO2K1
- Filtration is a ----- operation to separate solids from fluids  
a. Chemical  
b. Physical  
c. Biological  
d. Biochemical  
CO3K3
- The fabrics used in technical applications, such as road and railway embankments are referred to as  
a. Agro textile  
b. Defense textiles  
c. Geotextile  
d. Automobile textiles  
CO3K3
- Masks are categorised under  
a. Medical textiles  
b. Protective textiles  
c. Survival textiles  
d. Defence textiles  
CO4K2
- Mechanical organs such as artificial kidneys are  
a. Implantable materials  
b. Non implantable materials  
c. Extra corporal devices  
d. Hygiene textiles  
CO4K3
- Clothes that provide care, freshness, comfort and protection for skin are referred to as  
a. Wearable textiles  
b. Active textiles  
c. High performance textiles  
d. Medical textiles  
CO5K3
- Identify the heat-resistant, synthetic, lightweight fiber that delivers high tensile strength  
a. Kevlar  
b. Carbon  
c. Glass  
d. Vectran  
CO5K2

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 11.a. Define functional textiles and outline its scope. CO1K4  
(or)
- 11.b. Describe the classification of functional textiles. CO1K2
- 12.a. Mention the application of Agro textiles. CO2K2  
(or)
- 12.b. Explain floor coverings. CO2K2
- 13.a. Describe the fibers used in filtration fabrics. CO3K2  
(or)
- 13.b. Brief on the essential properties of geo textiles. CO3K2
- 14.a. Write a note on the types of survival textiles. CO4K3  
(or)
- 14.b. List the properties of the fibres used in medical textiles. CO4K3
- 15.a. Describe the various fibers used in Space textiles. CO5K2  
(or)
- 15.b. Write a note on wearable technology. CO5K2

**Part C**

**5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

- 16.a. Describe the high performance fibers and fabrics used in functional textiles. CO1K2  
(or)
- 16.b. Discuss the upcoming techniques and fabric formation. CO1K2
- 17.a. Record the various packing materials and their application. CO2K3  
(or)
- 17.b. Classify home textiles and brief the properties required. CO2K2
- 18.a. Describe the various techniques of cleaning filtration textiles. CO3K2  
(or)
- 18.b. Explain the various fibres used in geo textiles. CO3K2
- 19.a. Classify medical textiles and explain it with suitable example. CO4K2  
(or)
- 19.b. Summarise the various type of protective textiles. CO4K2
- 20.a. Explain the application of textiles in various sports activities. CO5K3  
(or)
- 20.b. Criticize about the sustainability and ecological aspects of automobile textiles. CO5K4

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