## PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

### MSc DEGREE EXAMINATION MAY 2025

(Second Semester)

#### Branch - COSTUME DESIGN & FASHION

#### **TECHNICAL TEXTILES**

Time: Three Hours

Maximum: 75 Marks

#### **SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

 $(10 \times 1 = 10)$ 

Module No.	Question No.	Question	K	СО
110.	110.	Polyethylene fibres comes under the category of fibres.	Level	
	1	a) Natural		1
	1	b) Polyolefin	K1	COI
	<u> </u>	c) Ceramic	***	001
		d) Aramid		
1		fibres transmit light between the two ends of the fibre.	1	<del>                                     </del>
		a) Optical		i
	2	b) Melamine	K2	COI
		c) Super absorbent		ļ
		d) Aramid		
		High twisted yarns are used inbandages.	1	
	_	a) Compression	ļ	
	3	b) Elasticized	K1	CO2
		c) Light support woven		
2		d) Orthopedic cushion		
		Sutures are	ł	
	4	a) Biodegradable		000
i		b) Non biodegradable c) Both a and b	K2	CO2
}		d) None	1	
	5	is the largest group of geo synthetics.	-	<del> </del> -
		a) Geonets	ĺ	
		b) Geogrids	K1	CO3
ļ		c) Geo membranes		005
3		d) Geo textiles		
3	6	The main function of mulch mat is to		
		a) Control water absorption		
ſ		b) Control micro organisms	K2	CO3
		c) Control pesticides		,
		d) Control weeds		
	7	Coatings arethan membranes.	77.1	COS
		a) Heavier b) Thicker c) Costlier d) Lighter	K1	CO3
4		The use of geotextile to prevent intermixing of soil layers is		
- 1		called		~~-
		a) Separation b) Reinforcement	K2	CO3
		c) Drainage d) Protection		
	9	These types of materials can revert from the current shape to		
İ		a previously held shape, usually due to the action of heat.	]	
-		a) Shape memory polymers	K1	CO4
_		b) Phase change materials	***	JJ7
5		c) Chromic materials	1	
-		d) Conductive materials		
ł	10	Quick absorption and fast drying is the most important	<sub>170</sub>	004
		feature of textiles.	K2	CO4
		a) Mobile b) Medical c) Sports d) Industrial	-1	

# SECTION - B (35 Marks) Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$ 

Module No.	Question No.	Question	K Level	со
1	11.a.	List out the various applications of technical textiles in detail.		
	(OR)			CO1
	11.b.	Discuss the role of aramid fibres in technical textiles, types and its properties.		
2	12.a.	Explain the role of bio materials used in medical textiles.		CO3
		(OR)	K3	
	12.b.	Explain the role of bandages used in non implantable materials in medical textiles.		
·	13.a.	Categorise the various fibres and fabrics used for protective textiles.		
3	(OR)		K4	CO4
:	13.b.	Analyse the fibre requirements for transportation textiles.		
4 (	14.a.	Infer membranes and its method of incorporation in textiles.		
	(OR)		K4	CO4
	14.b.	Examine the fibres and fabrics used in flame resistant protective clothing.		
5	15.a.	Explain the chromic materials and its various types in detail.	K5	
	(OR)			CO5
	15.b.	Elaborate the latest fibres and fabrics used in sports textiles.		

### SECTION -C (30 Marks) Answer ANY THREE questions ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$ 

Module No.	Question No.	Question	K Level	СО
1 -	16	Elaborate the role of aromatic polyester fibres and carbon fibres and their properties in detail.	K4	CO1
2	17	Classify the role of extra corporeal devices and the fibres used in medical textiles.	K4	CO2
3	18	Enumerate the various functions of geotextiles in detail.	K4	соз
4 ,	19	Explain electrical protective clothing in detail.	K5	CO4
5	20	Discuss the applications of smart textiles in textiles and clothing in detail.	K5	CO5