

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(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 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Technical textiles are basically used for _____ characteristics. a) Decorative b) look c) performance d) aesthetic	K1	CO1
	2	Relate the synthetic material with appearance similar to natural grass. a) Ballooning fabrics b) artificial turf c) parachute d) composite	K2	CO1
2	3	Self cleaning concept is based on _____ plant's leaves. a) Marigold b) thulasi c) lotus d) sunflower	K1	CO2
	4	Sodium alginate fibres are mostly used in a) Medical textiles b) agrotexiles c) geotextiles d) ecotextiles	K2	CO2
3	5	Relate the fibre most commonly used in agrotexiles. a) viscose b) polypropylene c) wool d) silk	K1	CO3
	6	_____ is a para aramid fibre which is strong and heat resistant synthetic fibre. a) Nomex b) Kevlar c) PBI d) twaron	K2	CO3
4	7	_____ fibres are used for making extracorporeal devices in medical textiles. a) staple b) filament c) hollow d) fine	K1	CO3
	8	The use of geotextile to prevent intermixing of soil layers is called _____. a) separation b) reinforcement c) drainage d) protection	K2	CO3
5	9	These types of materials can revert from the current shape to a previously held shape, usually due to the action of heat. a) shape memory polymers b) phase change materials c) chromic materials d) conductive materials	K1	CO4
	10	Quick absorption and fast drying is the most important feature of _____ textiles. a) mobile b) medical c) sports d) industrial	K2	CO4

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Discuss the scope of technical textiles in detail	K3	CO1
	(OR)			
	11.b.	Identify any five high performance fibres used in technical textiles sector.		
2	12.a.	Explain the speciality fibres used in medical textiles.	K3	CO3
	(OR)			
	12.b.	Explain the various functions of geotextiles.		
3	13.a.	Categorise the various fibres and fabrics used for protective textiles.	K4	CO4
	(OR)			
	13.b.	Analyse the fibre requirements for transportation textiles.		
4	14.a.	Infer waterproof breathable fabrics and its types.	K4	CO4
	(OR)			
	14.b.	Examine the different methods of incorporation of membranes in waterproof breathable fabrics.		
5	15.a.	Explain phase change materials and methods of incorporation in textiles.	K5	CO5
	(OR)			
	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 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Elaborate the role of aramid and carbon fibres and their properties in detail.	K4	CO1
2	17	Classify the role of non-implantable materials in medical textiles.	K4	CO2
3	18	Enumerate the essential properties required for geotextiles.	K4	CO3
4	19	Explain the application of chemical protective clothing in detail.	K5	CO4
5	20	Evaluate the applications of smart textiles in textiles and clothing in detail.	K5	CO5

Z-Z-Z END