

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023  
(First Semester)

Branch - COSTUME DESIGN AND FASHION

ADVANCED TEXTILE SCIENCE

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	Name the component of wool fibre. a) Cellulose                      b) Keratin c) Fibroin                          d) Sericin	K1	CO1
	2	Which of the following process is related to Jute fibre? a) Ginning                          b) Degumming c) Retting                          d) Felting	K2	CO1
2	3	Which of the following spinning technique used to manufacture Viscose rayon? a) Wet                                  b) Melt c) Dry                                  d) All of these	K1	CO2
	4	Show the fibre having comparatively low moisture regain value. a) Viscose                          b) Tencel c) Acetate                          d) Cuprammonium rayon	K2	CO2
3	5	Name the fibre produced by using Caprolactam as monomer. a) Polyester                      b) Nylon 6 c) Polyacrylonitrile              d) Polyurethane	K1	CO3
	6	Among the following, which fibre possess more stretchability? a) Polyester                      b) Nylon 6,6 c) Polyacrylonitrile              d) Polyurethane	K2	CO3
4	7	Name the spinning method which achieves highest productivity. a) Rotor    b) Air jet    c) Ring    d) Compact	K1	CO4
	8	A yarn produced with filament at the core covered by staple fibres is known as a) Core Spun                      b) Cover c) Air jet                              d) Compact	K2	CO4
5	9	Name the spinning system which produces multi component yarn. a) Bobtex                          b) Friction c) Compact                          d) Twist less	K1	CO5
	10	Edge crimping produces _____ yarn. a) Stretch                          b) Modified stretch c) Bulk                                d) All of these	K2	CO5

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.	Choose the method for extraction of bast fibres.	K3	CO1
	(OR)			
	11.b.	Construct the applications of cotton and Jute fibre.		
2	12.a.	Construct and compare the types of fibre spinning systems.	K3	CO2
	(OR)			
	12.b.	Build the differences between viscose and Tencel fibre.		
3	13.a.	Examine the properties and applications of polyamide fibre.	K4	CO3
	(OR)			
	13.b.	Analyze about various Polyolefin fibres.		
4	14.a.	Discover the essential and desirable properties of fibres required for yarn production.	K4	CO4
	(OR)			
	14.b.	Distinguish the principles of core and cover yarn formation.		
5	15.a.	Assess the various texturing methods to produce bulk yarns.	K5	CO5
	(OR)			
	15.b.	Explain the methodology and concepts of Bobtex spinning.		

**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	Appraise the influence of Degree of polymerization and crystallinity on the fibre property.	K5	CO1
2	17	Discover the steps in the Manufacturing of viscose.	K4	CO2
3	18	Explain about the production of Elastomeric fibres and its application.	K5	CO3
4	19	Compare the production process and yarn properties of Ring spun and OE spun yarns.	K4	CO4
5	20	Analyze the spinning process and yarn quality of compact and ring spinning.	K4	CO5

Z-Z-Z

END