22CDP208N/ 22CDP208

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Second Semester)

Branch – **COSTUME DESIGN & FASHION**

FUNCTIONAL FINISHING ON 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	Which treatment is given to natural fibres to prevent further shrinkage after washing? a. Weighting b. Sanforizing c. Desizing d. Calendaring	K1	CO1
	2	What is the purpose of moisture management finishes? a. To decrease the moisture-holding power of the fabrics b. To increase the moisture-holding power of the fibres c. To prevent water from spreading on the surface of the fabrics d. To maintain the body temperature	K2	CO1
2	3	Which type of fabrics need insect-repellent finishes? a. Protein and synthetics b. Natural and synthetics c. Protein and cellulosic d. Only synthetics	K1	CO2
	4	Which enzyme is principally used for the process of bio-finishing? a. Isomerase b. Cellulase c. Peptine d. Ligases	K2	CO2
3	5	Which of the following is a basic concept of Sol-gel technology in special finishing? a. It is highly sensitive and uses carcinogenic chemicals b. It is mostly producing formaldehyde release c. It is environmentally friendly due to one-step application using non-halogenated chemicals d. It is applied to non-organic textile materials	K1	CO3
	6	A fabric with an SPF of >40 is considered to provide _____ protection against UV radiation. a. Excellent b. Very good c. Good d. Poor	K2	CO3
4	7	Identify the use of enzymes in functional finishes. a. To decrease the efficiency of textile processing b. To reduce the environmental pollution due to chemical usage c. To decrease the textile waste d. To improve the rate of absorbency	K1	CO4
	8	Antibacterial and UV protection functionalities of synthetic can be achieved by the process called a. Acid coagulation b. Alkaline hydrolysis c. Oleophilicity d. Hydrophilic monomers	K2	CO4
5	9	For what reason, the RA 49 test method is applied to textile fabrics? a. Water repellency b. Insect resistance c. Absorbency d. Moisture analysis	K1	CO5
	10	From the following test methods, find a suitable test for Liquid Moisture Management properties of textile fabrics. a. AATCC 70 b. AATCC 21 c. TM 195 d. TM 200	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.	Can you demonstrate the method of developing a shrink-resistant finish.	K3	CO1
		(OR)		
	11.b.	Using the information you have learned about finishes for comfort and performance, demonstrate the thermal regulation finishes.		
2	12.a.	What inference can you make for wrinkle resistance finishing?	K4	CO2
		(OR)		
	12.b.	What are the key factors contributing to the application of waterproofing on textile materials?		
3	13.a.	How would you analyze the process parameters of antimicrobial finishing?	K4	CO3
		(OR)		
	13.b.	How would you categorize the features of UV protection finish?		
4	14.a.	What facts would you select to show the surface modification of synthetic fibres?	K3	CO4
		(OR)		
	14.b.	How would you organize the enzymes to show their uses in textile finishing?		
5	15.a.	How would you assess the absorbency of textiles using TM 195?	K5	CO5
		(OR)		
	15.b.	Evaluate the AATCC 70 test method for water repellency.		

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	Classify the functional finishes in detail.	K4	CO1
2	17	Evaluate the effectiveness of flame retardant finish on protective garments.	K5	CO2
3	18	Analyze the recent development of finishing technology on textile materials.	K4	CO3
4	19	How would you infer the application of enzymes in the finishing of technical textiles?	K4	CO4
5	20	Evaluate the test method for bacterial alpha-amylase enzymes used in desizing.	K5	CO5

Z-Z-Z END