24900262

QP CODE: 24900262

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Name:.....

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

FIRST SEMESTER MGU-UGP (HONOURS) REGULAR EXAMINATION NOVEMBER 2024

First Semester

Discipline Specific Core Course - MG1DSCTXL100 - TEXTILE SCIENCE

(2024 ADMISSION ONWARDS)

Duration: 1.5 Hours

Maximum Marks: 50

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Interest (I), Appreciation (Ap), and Skill (S)

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Part A

[Learning Domain][CO No(s)]

		·		ice Questions h questions carries 1 mark.		
1	What happens when cotton fibres are immersed in water?		rsed in water?	[U]	[2]	
	a)	They repel water	b)	They absorb water		
	c)	They dissolves	d)	They disintegrates		
2		ntify the distinguishing features of s mination.	ilk fi	bers under microscopic	[U]	[2]
	a)	Scales	b)	Node-like structures		
	c)	Cross-markings	d)	Fibrils		
3	Wł	nat is a key feature of polyster in terr	ms of	durability?	[U]	[2]
	a)	it is easily damaged	b)	it has low tensile strength		
	c)	it is highly durable and strong.	d)	it deteriorates quickly		
4	Ide	ntify natural plant-based fiber?			[U]	[1]

	a)	wool	b)	polyester		
	c)	silk	d)	cotton		
5	Wh	hat is the first step in the processing	of co	otton after harvesting?	[U]	[2]
	a)	carding	b)	ginning		
	c)	spinning	d)	weaving		
6	Ide	ntify the smell while wool burns.			[U]	[2]
	a)	Burning of plastic.	b)	Burning of paper.		
	c)	Burning of feathers or hair.	d)	Burning of wood.		
7	Lis	t out Acrylic fiber commonly used	for?		[U]	[2]
	a)	Outdoor clothing	b)	Knit wear and Active Wear		
	c)	Upholstery and Furniture	d)	All of the above		
8	Wh	nich of the following is a variation of	of Pla	in Weave?	[U]	[4]
	a)	Twill weave	b)	Satin weave		
	c)	Rib weave	d)	Herringbone weave		
9	Na	me the fabric that is made using Jac	quare	d weave.	[U]	[4]
	a)	Brocade	b)	Denim		
	c)	Velvet	d)	Corduroy		
10	Wh	Which weave is characterised by a crinkled textured surface?			[U]	[4]
	a)	Satin Weave	b)	Crepe Weave		
	c)	Plain Weave	d)	Twill Weave		

 $(10 \times 1 = 10)$

Part B Fill In The Blanks Answer all questions

11	The formation of small balls on the surface of fabric is termed as	[U]	[2]
12	A distinguishing feature of acetate fibre is theirappearance when viewed under a microscope.	[U]	[2]

13	The process of removing seeds fron cotton fibers called	[U]	[2]
14	Nylon is afibre.	[U]	[2]
15	Nylon 6 is made from a single six carbon substance called	[U]	[2]
16	The rotor speed in rotary spinning affects Quality.	[U]	[3]
17	A higher Yarn count indicates aYarn.	[U]	[3]
18	Bird's eye weave comes under the weave category .	[U]	[4]
19	Lappet weave uses an extra yarn to create patterns .	[U]	[4]
20	All laces are characterised by an structure and decorative design.	[U]	[4]

 $(10 \times 1 = 10)$

Part C Answer In One Word Or One Sentence. Answer all questions

21	Which property of cotton fibre allows it to absorb moisture?	[U]	[2]
22	What is a common drawback of acrylic fabrics?	[U]	[2]
23	Give one major drawback of synthetic fibers?	[U]	[1]
24	What is a Acetate rayon? and note down the properties.	[U]	[2]
25	which fibre is used for making sports wear?	[U]	[2]
26	What is the Primary Purpose of Ring spinning?	[U]	[3]
27	How is yarn count measured?	[U]	[3]
28	What is the primary purpose of using extra warp yarns in weaving?	[U]	[4]
29	Name another name for the Leno weave.	[U]	[4]
30	Classify twill weave based on the angle of the diagonals.	[U]	[4]

 $(10 \times 1 = 10)$

Part D

Short Answer Questions

Answer any 5 questions./ each question carries 2 marks.

31	List down any six properties of wool.	[U]	[2]
32	Why are synthetic fibers preferred in industrial applications?	[U]	[1]
33	What is the significance of combing in cotton processing?	[U]	[2]
34	Define Sericulture.	[U]	[2]
35	Differentiate Single yarn and Ply yarn?	[U]	[3]
36	Illustrate the point paper diagram of a 3x1 right hand twill.	[U]	[4]

 $(5 \times 2 = 10)$

Part E Long Answer Questions. Answer any two questions./ each question carries 5 marks.

37	Explain the key properties of acetate rayon and discuss its advantages and disadvantages in textile applications.	[U]	[2]
38	Write in detail about Hand spinning?	[U]	[3]
39	Discuss the following - swivel weave, lappet weave, spot weave.	[U]	[4]
40	Explain the physical, chemical and microscopic test of silk.	[U]	[2]

 $(2 \times 5 = 10)$

END OF THE QUESTION PAPER
