Register Number:……..

KUMARAGURU
college of technology
character is life

B.E/B.TECH DEGREE EXAMINATIONS: APRIL /MAY 2024

(Regulation 2018)

Sixth Semester

FASHION TECHNOLOGY

U18FTE0009: Functional Clothing

COURSE OUTCOMES

CO1: Summarize the classification and design requirements of various classifications of functional clothing

CO2: Choose the requirements of functional clothing as per the end use of the consumer

CO3: Appraise technical specifications for functional clothes

CO4: Choose suitable textile raw materials suitable for developing functional clothes

CO5: Apply the knowledge on textiles processes in designing functional clothing

CO6: Acquire knowledge on the evaluation methods and standards available to evaluate the various functional clothing

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	Classify the functional clothing.	CO1	[K_3]
2.	Mention basic requirements for functional clothing.	CO1	[K_1]
3.	Specify the purpose of medical textiles and their applications.	CO2	[K_2]
4.	List the few healthcare and hygiene medical textile products.	CO2	[K_1]
5.	Recognize the factors to be considered for construction of protective garments.	CO3	[K_2]
6.	Point out the properties required for ballistic and blunt impact protective garments.	CO3	[K_3]
7.	Identify the materials requirements for construction of sports foot wear.	CO4	[K_2]
8.	Reveal the types of finishes used for chemical protective garments.	CO4	[K_2]
9.	Provide the basic requirements for space suit clothing.	CO5	[K_2]
10.	What is antigravity suit?	CO6	[K_1]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.	a)	Explain in detail about the concept and importance of design and engineering in functional clothing construction system.	10	CO1	[K_2]
	b)	Provide a note on performance analysis of functional clothing.	6	CO1	[K_2]
12.	a)	Analyze the various textile materials and structures used for manufacturing of implants and non-implants, extra corporeal devices products.	10	CO2	[K_4]
	b)	Brief a note on design and applications of therapeutic and bio sensing garments.	6	CO2	[K_2]
13.	a)	Illustrate the mechanism, chemistry and various chemicals used to develop flame retardant protective garments and their evaluation techniques	10	CO3	[K_4]
	b)	List the importance of electrical protective clothing and radiation protection.	6	CO3	[K_2]
14.	a)	Elaborate the requirements of physical and chemical characteristics of fibres, yarn and fabric structures used to produce the mechanical protective garments.	10	CO4	[K_2]
	b)	Explain in detail about the materials used, requirements and functions of vanity clothing system for supporting and enhancing of body shaping.	6	CO4	[K_2]
15.	a)	Discuss in detail about the selection of materials and their functions on construction of sportswear clothing for fatigue reducing and performance monitoring.	10	CO5	[K_2]
	b)	Clearly bring out the need of design and fit for sports foot wear.	6	CO5	[K_3]
16.	a)	Explain in detail about the selection of materials, requirements, design and functional modification of garments clothing for people with special needs.	8	CO6	[K_2]
	b)	Analyze the material requirements and functions of different cross functional clothing system for special applications.	8	CO6	[K_4]

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