

B.TECH DEGREE EXAMINATIONS: APRIL/MAY 2014

(Regulation 2009)

Seventh Semester

FASHION TECHNOLOGY

FTY121:Apparel Finishing and Care

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

- The amount of softener required to apply at 3% owf to 500kg of fabric is
 - 0.15 kg
 - 1.5kg
 - 150 kg
 - 15 kg
- Match the following

Mechanism of water repellency	Chemical
i. Mechanical incorporation -	a. silicone
ii. Chemical reaction -	b. paraffin emulsions
iii. Formation of repellent film -	c. microporous coatings
iv. Fabric construction -	d. fatty acid resins

 - i - c, ii - d, iii - a, iv - b
 - i - b, ii - a, iii - d, iv - c
 - i - d, ii - c, iii - a, iv - b
 - i - b, ii - d, iii - a, iv - c
- The enzyme processing is strongly influenced by _____
 - pH
 - Time
 - Temperature
 - Agitation
 - (i), (ii) and (iv) only
 - (i), (iii) and (iv) only
 - (i), (ii) and (iii) only
 - (i), (ii), (iii) and (iv)
- The wash in which the stones are presoaked in potassium permagnate for localized bleaching in denim processing is -----
 - acid wash
 - whiskering
 - rinse wash
 - snow wash
- The processing of separation, consolidation and deformation of materials by atom or molecule is -----
 - plasma technology
 - nanotechnology
 - liquid ammonia treatment
 - laser technology
- Metalloid stains can be removed by _____
 - reduction
 - oxidation
 - oxidation followed by reduction
 - reduction followed by oxidation
- Which one of the following is having maximum Limiting Qxygen Index (LOI)
 - cotton
 - wool

- acrylic
 - polyester
- For water repellency, the relationship between critical surface energy or the surface tension of the fabric (γ_c) and the liquid (γ_L) should be _____
 - $\gamma_c < \gamma_L$
 - $\gamma_c > \gamma_L$
 - $\gamma_c = \gamma_L$
 - $\gamma_c \leq \gamma_L$
 - Safe ironing temperature for silk
 - 160⁰ c
 - 200⁰ c
 - 210⁰ c
 - 220⁰ c
 - Match the following

Nature of stain	Stain
i. acid	a. margarine
ii. fats and oils	b. black ink
iii. proteinic	c. urine
iv. metallic	d. fish slime

 - i - c, ii - a, iii - b, iv - d
 - i - d, ii - c, iii - b, iv - b
 - i - c, ii - a, iii - d, iv - b
 - i - b, ii - a, iii - d, iv - c

PART B (10 x 2 = 20 Marks)

- State the primary and secondary effects of finishing.
- List out the type of finishes applied on garments made of polyester.
- Define Limiting Oxygen Index and give its significance with respect to flame retardancy.
- State the importance of UV protection finish and list the chemicals used.
- Give the mechanism of enzyme treatment in denim washing.
- Enlighten the terms marble wash and crush finish.
- State the advantages of using microencapsulation technique.
- Write the various mechanisms of plasma treatment.
- Enumerate the steps involved in laundering process.
- List out different types of care labels and their contents.

PART C (5 x 14 = 70 Marks)

- Describe the objectives of various mechanical and chemical finishing applied on cotton fabrics and state their significance.

(OR)

 - Describe the various finishes used on silk and wool materials with their significance.
- Name different types of antimicrobial agents and describe its method of application on textiles.

(OR)

- b) Explain the method of releasing soil from fabric with reference to chemicals used and method of application.

23. a) Describe the process conditions, machineries and chemicals used for stone wash, ozone and laser fading in denim processing.

(OR)

- b) Describe the process of enzyme wash and bio-polishing in denim processing.

24. a) Explain various methods of producing microcapsules and explain its application in textile finishing.

(OR)

- b) Elaborate on the mechanism of phase changing material and its application in functional clothing.

25. a) Explain the working principle of washing machine with reference to various parts.

(OR)

- b) Elucidate on different types of stains and the stain removal techniques used.
