

Register Number: .....

**B.TECH DEGREE EXAMINATIONS: APRIL/MAY 2014**

(Regulation 2009)

Fifth Semester

**TEXTILE TECHNOLOGY**

TTX110: Textile Chemical Processing II

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Batik printing on textile fabric is classified as \_\_\_\_ style
  - a) Discharge
  - b) Resist
  - c) Direct
  - d) Kalamkari
2. Which one of the following property is required for the chemical used in printing screen preparation?
  - a) Light sensitive
  - b) Water sensitive
  - c) Air sensitive
  - d) Heat sensitive
3. Which one of the following material is used in rotary screen preparation?
  - a) Nylon
  - b) Nickel
  - c) Polyester
  - d) Aluminum
4. Transfer printing is suitable for \_\_\_\_\_ apparels
  - a) Polyester
  - b) Nylon
  - c) Acrylic
  - d) Viscose rayon
5. Features of water repellent finished fabrics
  - a) Impermeable to water
  - b) Impermeable to air
  - c) Impermeable to both air and water
  - d) Impermeable to moisture vapour
6. The most important finish for cotton knits
  - a) Creping
  - b) Anti-shrink
  - c) Flame proof
  - d) Soil resist
7. Silk like effect on cotton fabric is obtained by using
  - a) Embossing calander
  - b) Scheriner calander
  - c) Friction calander
  - d) 7 bowl calander
8. The flammability of textile material is assessed by evaluating
  - a) Melting point
  - b) Pyrolysis temperature
  - c) Limiting Oxygen Index
  - d) Glass transition temperature
9. In peroxide bleach bath formulation, it is always advisable to maintain the ratio of  $\text{Na}_2\text{O} : \text{Si O}_2$

as

- a) 2:8
  - b) 2:6
  - c) 2:4
  - d) 2:2
10. Good print pastes show fluidities of \_\_\_\_ to \_\_\_\_ at a load of 1000g and \_\_\_\_ to \_\_\_\_ at 100g
- a) 0.010;0.044;0.010;0.018
  - b) 0.005;0.022;0.005;0.009
  - c) 0.0010;0.0044;0.0010;0.0018
  - d) 0.0005;0.0022;0.0005;0.0009

**PART B (10 x 2 = 20 Marks)**

11. List types of thickeners.
12. State the importance of after-treatments for printed textiles.
13. Outline the features of screen printing.
14. What is digital printing?
15. State the significance of softening.
16. List the features of anti-microbial finish.
17. Outline the importance of bio wash finish.
18. Outline the features of anti-static finish.
19. How degree of resin cross-linking is evaluated in a resin finished fabric?
20. How rubbing fastness of dyed/printed textile material is determined?

**PART C (5 x 14 = 70 Marks)**

21. a) Explain about print paste constituents and their characteristics.

**(OR)**

- b) Write about process and mechanism of steaming, curing, ageing and open soaping.

22. a) Explain about working of automatic flat bed screen printing machine.

**(OR)**

- b) Give a detailed note on printing screen preparation methods.

23. a) Write in detail about various Calendering finishes.

**(OR)**

b) Explain about mechanism of easy-care and durable press finishing and application methods.

24. a) Explain about theory and mechanism of flame retardancy and flame retardant finishing of cotton textiles.

**(OR)**

b) Explain about mechanism of water repellency and water repellent finishing of textile materials.

25. a) Write in detail about influence of chemical concentration, time, temperature and pH in textile wet processing.

**(OR)**

b) Give a detailed note on process and quality control measures related to scouring, bleaching and mercerizing.

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