



Register Number:.....

**B.TECH DEGREE EXAMINATIONS: NOV/DEC 2014**

(Regulation 2009)

Fifth Semester

**FASHION TECHNOLOGY**

FTY113: Textile Chemical Processing

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

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

1. The Cotton mercerized fabric has a barium activity number
  - a) 80-100
  - b) 100-120
  - c) 130-160
  - d) 180-200
2. In which type of treatment, you can get smooth drying of white cotton shirts and blouses
  - a) Cross-linking
  - b) antistatic
  - c) calendering
  - d) compacting
3. Choose the incorrect statement from the following.
  - a) Rate of dyeing is inversely proportional to the radius of the fibre.
  - b) Rate of dyeing is inversely proportional to the square root of the fibre.
  - c) In the dyeing of cotton with direct dyes heat is generated.
  - d) Lower the Tex of the fibre deeper is the shade
4. Jet dyeing machine is based on the principle of
  - a) Dye liquor stationary – fabric moving
  - b) Dye liquor moving – fabric stationary
  - c) Both dye liquor and fabric moving
  - d) Both dye liquor and fabric stationery
5. Choose the incorrect statement from the following.
  - a) Printing consumes less water
  - b) Cost of printing per meter is high
  - c) Half bleached fabric is used for printing
  - d) In printing, salt is not added for better exhaustion

6. The function of hydroscopic agents used in printing paste is to
- a) Take up sufficient amount of water      b) Reduce frothing during steaming
- c) fixation of colours      d) prevent reduction of dyes
7. Match the following:
- P- Khadi printing      -- (i) velvet effect
- Q- Flock printing      – (ii) raised embroidery effect
- R- Foam printing      --- (iii) No soaping of printed fabrics necessary
- S- Pigment printing      - (iv) more economical
- a) P-iv, Q-iii, R-ii, & S- i are correct      b) P-iii, Q-ii, R-i, & S- iv are correct
- c) P-ii, Q-i, R-iv, & S- iii are correct      d) P-i, Q-iv, R-iii, & S- ii are correct
8. Flock is nothing but -----
- a) Wax      b) resin
- c) oil      d) soap
9. Eco labeling means that
- a) products with reduced environment impact      b) non-industrial product groups
- c) using the best available technology      d) ensure that unlimited proportion of the product
10. The maximum pollution loading process in cotton is
- a) Desizing      b) Scouring
- c) Dyeing      d) Printing

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

11. State the conditions needed to carry out the acid desizing.
12. Distiguish between tension and tensionless mercerization of goods.
13. Distinguish between reactive fastness properties with direct dye fastness properties.
14. Mention the preliminary steps be taken for polyester fabric dyeing.
15. Enlist the properties of thickeners.
16. Distinguish between natural thickeners with synthetic thickeners.
17. Write the advantages of resist style of printing.
18. Differentiate between flock printing and foam printing.
19. Write a brief note on banned dyes and chemicals.
20. Mention the characteristics of dyeing effluents.

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

21. a) Explain in detail the best method of singeing process for cotton materials. (7)
- (OR)**
- b) (i) Describe the padless mercerization process for cotton fabrics. (7)
- (ii) Explain how continuous peroxide bleaching is carried out in cotton fabrics. (7)
22. a) (i) Discuss the dyeing principle and application method of vat dyes on cotton. (10)
- (ii) Give an account on fastness properties of reactive dyes (4)
- (OR)**
- b) (i) Write elaborately on the application and conditions of soft flow dyeing machine. (10)
- (ii) State the merits and demerits of jigger dyeing machine. (4)
23. a) (i) Explain in detail the application of printing with reactive dye on cotton fabrics. (7)
- (ii) Discuss the processes of after treatments given for printing materials. (7)
- (OR)**
- b) Discuss the various ingredients used in making printing paste and explain their functions.
24. a) (i) Explain in detail the method of Roller printing with a neat sketch. (7)
- (ii) Write the process involved to make screens for printing. (7)
- (OR)**
- b) (i) Explain in detail the method of Transfer printing for textiles. (10)
- (ii) Write the latest developments in printing. (4)
25. a) Write in detail ETP's followed in textile industry to control pollution

**(OR)**

- b) (i) Discuss on German regulation and its implications on toxic substances. (7)
- (ii) Discuss the need for quality control and areas of quality control in wet processing. (7)

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