

**B.TECH., DEGREE EXAMINATIONS: NOV/DEC 2012**

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 concentration of NaOH used for mercerizing of cotton is \_\_\_\_\_
  - a) 40 - 45%
  - b) 18 - 22%
  - c) 5 - 8 %
  - d) 10 - 14 %
2. Which of the following is the universal bleaching agent?
  - a) Sodium hypochlorite
  - b) Calcium hypochlorite
  - c) Hydrogen peroxide
  - d) Sulphur dioxide
3. The bond formed between reactive dye and fibre is \_\_\_\_\_
  - a) Covalent bonds
  - b) Vander walls forces
  - c) Hydrogen bonds
  - d) Salt Linkages
4. The dye which give excellent fastness is \_\_\_\_\_
  - a) Vat dye
  - b) direct dye
  - c) Reactive dye
  - d) Natural dye
5. Printing is also called as \_\_\_\_\_
  - a) Dyeing
  - b) Localised dyeing
  - c) Finishing
  - d) Steaming
6. The dye suitable for Sublimation Transfer Printing(STP) is \_\_\_\_\_
  - a) Disperse dye
  - b) Direct dye
  - c) Vat dye
  - d) Reactive
7. In screen printing No. of screens required to make 16 colour pattern is \_\_\_\_\_
  - a) 10
  - b) 8
  - c) 4
  - d) 16
8. In screen printing the screen is made of \_\_\_\_\_
  - a) Nylon
  - b) Cotton
  - c) Wool
  - d) Flax
9. BOD means \_\_\_\_\_
  - a) Biological oxygen demand
  - b) biochemical oxygen demand
  - c) Best oxygen demand
  - d) bilateral oxidative demand

10. Tertiary treatment for Effluent\_\_\_\_\_
- a) Trickling filter
  - b) Aeration tank
  - c) Reverse osmosis
  - d) Sedimentation

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

- 11. What changes can be observed in a singed fabric?
- 12. Show the steps in the hydrolysis of starch during desizing.
- 13. Explain the terms “exhaustion” and “shade percentage”.
- 14. What is a dyeing assistant? State two examples of dyeing assistants.
- 15. Name various ingredients used in print paste
- 16. State about Tie and dye printing.
- 17. What do you understand by transfer printing?
- 18. List the objects of thickeners
- 19. State the government standard for effluent discharge
- 20. List any 4 banned dyes and chemicals

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

21. a) (i) Write a note on enzyme scouring (6)
- (ii) Explain with neat sketch the working of gas singeing m/c (8)

**(OR)**

- b) With a neat sketch explain the mecerisation of cotton fabric with pad-less chainless mercerizing m/c

22. a) Explain with a neat sketch the process of dyeing cotton fabric with jigger machine using H brand reactive dye

**(OR)**

- b) Explain with a neat sketch the process of dyeing polyester fabric with HTTP jet dyeing machine

23. a) With a neat sketch explain about printing of cotton fabrics carried out with pigment colours using rotary screen printing machine

**(OR)**

- b) (i) Briefly explain about different ingredients used in printing paste (6)

(ii) Briefly explain about styles of printing (8)

24. a) (i) With a neat sketch explain about garment (chest) printing machine (6)

(ii) Write short notes on special prints (8)

**(OR)**

b) Discuss in detail about the latest developments in printing

25. a) (i) Describe the various kinds of effluents produced by a textile chemical process house (6)

(ii) Explain in detail the process involved in effluent treatment plant (ETP) (8)

**(OR)**

b) (i) Briefly explain about the importance of eco-friendly wet processing (6)

(ii) Explain in detail about the working of computer colour matching system (8)

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