



Name :

Roll No. :

Invigilator's Signature :

CS/B.Tech (APM)/SEM-4/APM-404/2010

2010

TEXTILE WET PROCESSING – II

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $10 \times 1 = 10$
 - i) Alginate thickener is use for printing of cotton fabric with reactive dye, because
 - a) it contains higher amount of – OH groups
 - b) less amount of – OH groups.
 - ii) 'Doctor Steak' a fault of printed fabric is
 - a) linear lines
 - b) wavy lines.
 - iii) Function of doctor blade is to remove
 - a) printing paste from smooth surface of engraved roller
 - b) loose fibres, dirt etc. from engraved roller.



- iv) Discharge printing is
- style of printing
 - method of printing.
- v) Photosensitizer is
- an ingredient of printing paste
 - a catalyst used in screen preparation.
- vi) Decating is a
- mechanical finishing
 - chemical finishing.
- vii) Fabric made from fine cotton will wrinkle
- less
 - more.
- viii) DMDHEU is applied on cellulosic fabric for
- improving crease recovery property
 - improving antimicrobial property.
- ix) Durability of laundering is higher for
- anionic softener
 - cationic softener.
- x) Boric acid (H_3BO_3) and borax ($Na_2B_4O_7$) act as a flame retardant by
- condensed phase mechanism
 - vapour phase mechanism.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Write down the different styles of printing and different methods of printing.
3. Discuss the different faults generally generated in roller printing machine.
4. What do you know about quality of a thickener ? Write the functions of carrier and swelling agent ?
5. Explain the different flame retardant mechanism by flame retardant chemicals.
6. What are the various water pollution parameters of effluent water to be monitored for control of water pollution ?
7. Define water repellent fabric and water proof fabric with examples. What do you mean by the term 'Lotus Effect' ?

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

8. a) Describe the different steps to textile printing screen production.
b) Describe the different control points which control the flow of printing paste through the screen.
c) Describe the working principle of roller printing machine with help of schematic diagram. $6 + 3 + 6$
9. a) What is transfer printing ? "Transfer printing is a commercial decision". Justify the statement.
b) Discuss the different transfer printing mechanism.



- c) Discuss the selection criteria's of transfer printing dyes.
- d) Write the properties should have in transfer printing paper. $5 + 5 + 3 + 2$
10. a) Write the changes which occurs in fabric after calendaring.
- b) What are the basic differences between swizzing calendar and chasing calendar ? Explain with suitable schematic diagrams.
- c) How you will give durable embossing finishing on natural fibre and synthetic fibre ? $3 + 7 + 5$
11. Write short notes on any *three* of the following : 3×5
- a) Sanforizing
- b) Corduroy cutting
- c) Decating
- d) Silicon softener
- e) Moth proofing of wool and silk.
- f) BOD and COD.
12. a) Briefly explain the mechanism of creasing of cellulosic fibre with necessary representative formula.
- b) Discuss the factors which affect the wrinkle behaviour of a fabric.
- c) Explain the crease recovery mechanism of cellulosic fibre. $5 + 5 + 5$
13. a) Describe briefly the function and working principle of softening agent on textile material.
- b) What are the properties should have a good softener ?
- c) Discuss the different kind of softening agents with example and their advantages and disadvantages. $4 + 3 + 8$

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