

AT – 2/14

Textile Technology

Paper – II

Time : 2 hours

Full Marks : 100

The figures in the right-hand margin indicate marks.

*Answer Q. No. 1 of Group – A which is compulsory
and **four** questions from Group – B.*

Group – A

1. Answer all questions : 2×20 = 40
- (a) What problems are likely to be faced in wet processing, if singeing is not done ?
 - (b) Why is gas singeing most preferred ?
 - (c) Write the general process sequence for a dyed finish fabric.
 - (d) List out the advantages of enzymatic desizing.
 - (e) How is scouring different from souring ?
 - (f) What is chemicking ?

- (g) Name the dyes that can be applied on nylon.
- (h) List out the uses of knitted fabrics with reasons.
- (i) Name the regions in India where you find large number of textile wet processing industries.
- (j) Write the end uses of non-wovens.

Choose the correct answer from the options given below :

- (k) In polyester, singeing is done :
 - (i) On grey fabric
 - (ii) Before bleaching
 - (iii) Before dyeing
 - (iv) After dyeing
- (l) Chlorite bleaching is done in :
 - (i) Acidic pH, room temperature
 - (ii) Alkaline pH at boil
 - (iii) Acidic pH at boil
 - (iv) Alkaline pH, room temperature

- (m) Digital printing is possible at :
- (i) High speed
 - (ii) Medium speed
 - (iii) Slow speed
 - (iv) None of the above
- (n) Colour fastness is usually _____ in direct dyes.
- (i) Good
 - (ii) Poor
 - (iii) Excellent
 - (iv) Very good
- (o) Which of the following are water soluble dyes ?
- (i) Direct, Reactive
 - (ii) Reactive, Vat
 - (iii) Vat, Sulphur
 - (iv) Sulphur, Indigosol
- (p) Tendering in cotton can be determined by :
- (i) Whiteness Index
 - (ii) Fluidity
 - (iii) Barium activity number
 - (iv) Drop test

- (q) Curtains should have good colour fastness to :
- (i) Perspiration
 - (ii) Washing
 - (iii) Light
 - (iv) Rubbing
- (r) Sanforizing is basically a _____ finish :
- (i) Temporary chemical
 - (ii) Temporary mechanical
 - (iii) Durable chemical
 - (iv) Durable mechanical
- (s) Anti crease finish is usually given to :
- (i) Cotton
 - (ii) Polyester
 - (iii) Nylon
 - (iv) Wool
- (t) Following is no more commonly seen in integrated textile mill sector in India :
- (i) Spinning

- (ii) Looms
- (iii) Wet processing
- (iv) Garmenting

Group – B

2. Give a detailed account of mill planning and management in the context of a large textile production set up. Also discuss a few important labour laws pertinent to the industry. 15
3. (a) Explain Economic Order Quantity. Discuss the ways to reduce inventory cost in a textile mill. 6
(b) Make an assessment of the growth and status of the power loom sector and non-woven industry in India. 9
4. (a) What are enzymes ? Explain, in detail, the mechanism and process of enzymatic desizing. 7
(b) Why reactive dyes are called so ? Discuss the different ways in which they are applied in industrial practice. 8

5. With relevant technical details, discuss the various actions taking place in scouring of cotton. Also write typical recipe and process conditions for it.

15

6. (a) Briefly write the process of peroxide bleaching. Explain the role of stabilizer in this. Why is hydrogen peroxide most preferred among all bleaching agents ? 9
- (b) Describe how perspiration fastness is assessed for dyed textile material. 6
7. (a) Give the procedure for dyeing cellulosics with direct colours. 3
- (b) With suitable examples discuss the various styles of printing. 6
- (c) Briefly write the concept and significance of flame retardant and soil release finish. 6

