



- (viii) Give one name of catalyst used in caustic reduction of polyester.
- (ix) What is the effect of caustic reduction on denier?
- (x) \_\_\_\_\_ problem often arises during wet processing of wool.
- (b) Describe various methods of scouring of loose wool. **10**
- 2** (a) Explain the aminolysis of polyester in contest to mechanism, reactivity of amines and the location of attack. **10**
- (b) Describe the mechanism of caustic reduction of polyester. **5**

**OR**

- 2** Discuss various parameters that influence the weight reduction of polyester. **15**
- 3** Write short notes on any **three** of the following : **15**
- (a) Peroxide bleaching of wool
- (b) Nylon bleaching
- (c) Silk degumming
- (d) Plasma technology.

**SECTION - II**

- 4** (a) Answer the following objective questions. **10**
- (i) The concentration of mercerizing caustic is normally measured in \_\_\_\_\_.
- (ii) The luster of mercerized fabric is attributed to \_\_\_\_\_ reflectance of light.
- (iii) Mercerization is based on the \_\_\_\_\_ action of concentrated aqueous solution of alkali.
- (iv) What is the surface tension of mercerizing liquor?
- (v) Name the chemical test used for evaluation of the degree of mercerization.

- (vi) Give one example of non-cresylic wetting agent.
- (vii) Define semi mercerization.
- (viii) The high degree of twist produce high amount of luster. True or False. Justify.
- (ix) Name at least two fabric mercerizing machines.
- (x) The caustic concentration in recuperator is about \_\_\_\_\_.
- (b) Explain various factors which affects the luster of mercerized cotton. **10**
- 5** Discuss theory of mercerization in detail. **15**
- OR**
- 5** Discuss yarn mercerization in detail. **15**
- 6** Write short notes on any **three** of the following : **15**
- (a) Mercerizing wetting agents
- (b) Hot mercerization
- (c) Slack mercerization
- (d) Recuperator.
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