



SF-8143

B. E. - II (Sem. - III) (Textile Processing) Examination
May/June - 2011
Scouring & Bleaching - I
(New Scheme)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांश देव निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. - 2 (SEM. - 3) (TEXTILE PROCESSING)

Name of the Subject :
SCOURING & BLEACHING - 1 (NEW SCHEME)

Subject Code No. : 8 1 4 3 Section No. (1, 2,.....): 1&2

Seat No. :

Student's Signature

- (2) Answers to the two sections must be written in same answer book.
- (3) Figures to the **right** indicate full marks.

SECTION - I

- 1 (a) Answer the following objective questions. 10
- Soaps are nothing but_____.
 - Show the reaction scheme of saponification.
 - Which property to fabric is imparted during scouring process ?
 - Give the chemical name of Igepon T.
 - What precautionary measure should be taken before developing the pressure in kier ?
 - Define 'volume' strength of hydrogen peroxide.
 - What is the storage pH of hydrogen peroxide ?
 - State the function of sodium silicate in hydrogen peroxide bleaching.
 - _____ continuous bleaching machine is suitable for processing fabric in rope form.
 - Desizing does not impart hydrophilicity to the cotton fabric - True/False.
- (b) Enlist various ingredients used in scouring. Describe 10
with proper illustration the functions of caustic soda and surface active agents in scouring process.

- 2 (a) What is singeing ? Describe with neat diagram the most conventional method of singeing. 10
(b) State characteristic features of OBA. 5

OR

- 2 Discuss in detail the bleaching process with sodium chlorite. State drawbacks of sodium chlorite bleaching. 15
- 3 Write short notes on any three of the following : 15
(a) Merits and demerits of chemicking and peroxide bleaching.
(b) Acid desizing.
(c) Slack rope washing machine
(d) Advantages and limitations of J-box.

SECTION - II

- 4 (a) Answer the following objective questions. 10
(i) _____ toxic chemical is liberated during the bleaching action of sodium chlorite.
(ii) In which region of cotton fibre the oily impurities are present.
(iii) Name one safe activator used in chlorite bleaching.
(iv) Which colouring matter is present in added impurity ?
(v) How rust stains are removed ?
(vi) How the traces of dissolved oxygen from scouring liquor is removed ?
(vii) State the lime wash composition.
(viii) What is the function of buffer tank in kier ?
(ix) What is importance of air vent valve ?
(x) By which test the reducing behaviour of cellulose is evaluated ?
(b) Discuss various technical aspects of sodium hypochlorite in context to stability of pH. 10
- 5 (a) What is Desizing ? Explain 'Enzymatic Desizing' process in detail. 10
(b) Describe the mechanism of 'Enzymatic Desizing'. 5

OR

- 5** Give a critical review on bleaching of cotton fabric with hydrogen peroxide. **15**
- 6** Write short notes on any **three** of the following : **15**
- (a) Solvent scouring
 - (b) Acid desizing
 - (c) Souring
 - (d) Machine chemicking in pits.
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