



UH-8143

B. E. - II (Sem. - III) (Textile Processing) Examination

May\June - 2012

Scouring & Bleaching - I

(New Course)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवही पर अवश्य लपनी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<b>B. E. - II (Sem. - III) (Textile Processing)</b>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<b>Scouring &amp; Bleaching - I</b>	<input type="text"/>
Subject Code No. : <input type="text" value="8"/> <input type="text" value="1"/> <input type="text" value="4"/> <input type="text" value="3"/>	<input type="text"/>
Section No. (1, 2,...): <input type="text" value="1,2"/>	
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
- Unbleached textile materials absorb light in \_\_\_\_\_ region and reflect in \_\_\_\_\_ region of visible spectrum.
  - What is the most essential requirement in washing process ?
  - Hydrogen peroxide bleaching gives only temporary whiteness. -TRUE/FALSE.
  - What is the storage pH of hydrogen peroxide ?
  - \_\_\_\_\_ continuous bleaching machine is suitable for processing fabric in rope form.
  - Show the reaction scheme of saponification.
  - Give the chemical name of Igepon T.
  - Vat dyes are always recommended in coloured woven fabrics. - TRUE / FALSE.
  - State the chemical composition of bleaching powder.
  - What is the role of sodium silicate in hydrogen peroxide bleaching ?

- (b) What is chemicking ? Describe the manufacturing, applications and limitations of bleaching powder. 10
- 2 (a) Describe with neat diagram the working of 'Shearing & Cropping' machine. 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) Bromite desizing.
- (b) Stitching.
- (c) Natural impurities.
- (d) Slack rope washing machine.

### Section - II

- 4 (a) Answer the following objective questions : 10
- (i) What is 'PERCHING' ?
- (ii) State the object of shearing and cropping.
- (iii) What are enzymes ?
- (iv) \_\_\_\_\_ are also known as colourless dyes.
- (v) Textone is nothing but \_\_\_\_\_.
- (vi) De-esterificaion of oil is known as \_\_\_\_\_.
- (vii) State the chemical structure of oleic acid.
- (viii) Give one example of inorganic sequestering agent.
- (ix) State the lime wash composition.
- (x) What is importance of an air vent valve ?
- (b) Enlist various continuous bleaching ranges. Describe with neat diagram the working of any one continuous bleaching range suitable for open width fabric. 10
- 5 (a) Discuss various technical aspects of sodium hypochlorite in context to stability and pH. 10
- (b) Describe the scouring of coloured woven cotton fabric. 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) Mechanism of Enzymatic desizing.
- (b) Use of surface active agents in scouring.
- (c) Machine chemicking in pits.
- (d) Gas singeing machine.