



KC-8143

B. E. - II (Sem. - III) (Textile Processing) Examination
November / December – 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. E. - II (Sem. - III) (Textile Processing)	<input type="text"/>
Name of the Subject :	<input type="text"/>
Scouring & Bleaching - I (New)	<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)
- Vat dyes are always recommended in coloured woven fabrics. – TRUE / FALSE
 - Give one example with its chemical structure of reducing bleaching agent.
 - What is the composition of sodium hypochlorite bath at pH 7?
 - What is the active species of hydrogen peroxide?
 - Give reason why coloured woven goods are not scoured in pressure kier.
 - Soaps are nothing but _____.
 - Which property to fabric is imparted during scouring process?
 - What precautionary measure should be taken before developing the pressure in kier?
 - Give one example of oxidative bleaching agent.

- x. What is the dangerous zone of chemicking?
- b) Enlist various ingredients used in scouring. Describe with proper illustration (10) the functions of caustic soda and surface active agents in scouring process.
- 2 a) Discuss elaborately the oxidative degradation of cotton in hypochlorite (10) bleaching as a function of pH.
- b) Describe the chemicking in jigger. (05)

OR

- 2 Describe with relevant data the catalyzed decomposition of hydrogen (15) peroxide and the use of stabilizers its bleach bath.
- 3 Write short notes on **any three** of the following: (15)
 - a) Winch and open width washing machine
 - b) Grey inspection
 - c) Principle of shearing and cropping
 - d) Catalysts in hydrogen peroxide bleaching

SECTION II

- 4 a) Answer the following objective questions: (10)
 - i. _____ toxic chemical is liberated during the bleaching action of sodium chlorite.
 - ii. Name one safe activator used in chlorite bleaching.
 - iii. How are rust stains removed?
 - iv. What is the repeat unit of starch?
 - v. Enzymes that degrade starch are known as _____.
 - vi. Pectin is present in the lumen of cotton fibre. - TRUE / FALSE
 - vii. In end – to – end stitching, the thickness near the seam is _____ that of the fabric.
 - viii. What is QUENCHING?
 - ix. _____ is made from germinated barley.
 - x. _____ machine is generally used for washing of delicate fabrics.
- b) What is enzyme? Describe their role in desizing process in detail. (10)

- 5 Enumerate different types of continuous bleaching ranges. Describe with neat diagram the working of 'Harish Conibleach' range. (15)

OR

- 5 a) Explain in detail various impurities present in grey cotton fabric. (10)
b) Discuss in detail on stitching operation. (05)
- 6 Write short notes on **any three** of the following: (15)
- a) Rot steeping
 - b) Souring
 - c) Added impurities
 - d) Gas singeing machine
