

BTECH
(SEM IV) THEORY EXAMINATION 2018-19
CHEMICAL PROCESSING OF TEXTILES II

Time: 3 Hours**Total Marks: 70****Notes:** Assume any Missing Data.**SECTION A**

- 1. Attempt all questions in brief. 2 x 7 = 14**
- What are auxochromes and chromophores?
 - Define substantivity of dyes.
 - Differentiate between dyeing and stripping.
 - What is half emulsion ?
 - Differentiate between dye and pigment.
 - What are APLV machines?
 - Which fibre out of wool and silk is easy to dye and why?

SECTION B

- 2. Attempt any three of the following: 7 x 3 = 21**
- Describe dyeing process of fabric with Procion dyes with suitable dyeing parameters.
 - Describe application of disperse dyes on polyester with process parameters.
 - What is vatting process? Classify vat dyes with respect to vatting parameters.
 - What are indigosol dyes? Describe the application and properties of such dyes.
 - What are bifunctional dyes? Describe reactions involved with these dyes and cellulosic fibre.

SECTION C

- 3. Attempt any one of the following: 7 x 1 = 7**
- What are cone dyeing machines? State advantages of these machines.
 - What type of machines suitable for polyester dyeing? Describe such a machine with mechanical parameters.
- 4. Attempt any one of the following: 7 x 1 = 7**
- What type of machines are suitable for knitted fabric dyeing? Describe mechanical parameters of these machines.
 - Describe low liquor ratio dyeing machines.
- 5. Attempt any one of the following: 7 x 1 = 7**
- What are methods of printing? Describe the function of ingredients of discharge printing on cotton fabric.
 - Describe the importance of steaming after printing.
- 6. Attempt any one of the following: 7 x 1 = 7**
- Describe wrinkle free finish on textiles.
 - Describe anti-shrink finish on textiles.
- 7. Attempt any one of the following: 7 x 1 = 7**
- What is the importance of LOI of fibre? Describe the process of imparting permanent FR finish on cotton.
 - Cotton fabric has to be dyed in continuous dyeing range machine with addition of 2 % Remazol Red 5B and 1% Remazol orange 2R on weight of fabric. Calculate the concentration of Red 5B and Orange 2R in grams per liter required in the padding trough. Assume expression 80% and sp.gr of pad liquor is 1.04