

BTECH
(SEM IV) THEORY EXAMINATION 2018-19
TEXTILE AUXILIARIES

Time: 3 Hours**Total Marks: 70****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt all questions in brief.** **2 x 7 = 14**
- Define textile auxiliaries?
 - What is the surface tension?
 - What is the HLB value?
 - Define oxidizing agents.
 - Define LOI?
 - Give the full form of AATCC.
 - Write the general auxiliaries to be used in scouring?

SECTION B

- 2. Attempt any three of the following:** **7 x 3 = 21**
- What is the need of textiles auxiliaries? How can they be used in different processing operations?
 - What is the role of leveling and dispersing agents? Describe.
 - Suggest the typical ingredients used in textile printing. Write the role of binders, hygroscopic agents and anti-foaming agent?
 - Explain bundesmann test for water repellency? How does this method different from others.
 - Write down the classification of softeners to be used in textile chemical finishing? Explain and compare.

SECTION C

- 3. Attempt any one part of the following:** **7 x 1 = 7**
- What are surface active agents? What are their functions? How are they useful in textile wet processing
 - What is detergency? Describes its principal and chemistry?
- 4. Attempt any one part of the following:** **7 x 1 = 7**
- What are the objectives of wetting agents? Explain the mechanism of wetting? Explain the relationship between the drop angle and wet ability?
 - What is sequestering agents? How are they different from chelating agents?
- 5. Attempt any one part of the following:** **7 x 1 = 7**
- Explain the role of thickeners in printing paste? What is the different type of thickeners? Explain.
 - What is the role of dispersing agent and carrier in polyester dyeing? Explain.
- 6. Attempt any one part of the following:** **7 x 1 = 7**
- How can the urea formaldehyde, melamine formaldehyde, epoxides and triazones be used for resin finish on textiles?
 - Which bleaching auxiliary is known as universal bleaching agent? Write down its uses and advantages
- 7. Attempt any one part of the following:** **7 x 1 = 7**
- How can the wetting agents be evaluated by sinking test? Also explain the compatibility test for wetting agents.
 - Explain any two standard methods for checking the efficiency of flame retardants.