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SF-8362

B. E. III (Sem. VI) (Textile Processing) Examination

May / June – 2011

Chemistry & Applications of Textile Auxiliaries

(New Course)

Time : **3** Hours] [Total Marks : **100**

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **B. E. 4 (Sem. 7) (Textile Processing)**

Name of the Subject :

☛ **Chemistry & Applications of Textile Auxiliaries (New)**

☛ Subject Code No. : **8 3 6 2** ☛ Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

(2) Answers to the two sections must be written in same answer books.

(3) Figures to the right indicate full marks.

SECTION - I

1 (a) Answer the following objective questions. **10**

(i) Define Surfactant.

(ii) Give one example of Cationic dye fixing agent with its structure.

(iii) Anionic surfactants ionized in water into _____ and _____.

(iv) Surface tension of water decreases with addition of surfactant. True or False.

(v) Write down the formula to fin HLB value.

(vi) Explain the term Zwitter ion.

(vii) Give one example of amphoteric surfactant with its structure.

(viii) What is HLB ?

(ix) Define Non ionic surfactant.

(x) Write down one use of TROil.

(b) Explain in detail sodium salt of fatty acid. **10**

2 (a) Explain in detail anyone group of cationic surfactant. **10**

(b) Explain phosphate ester. **5**

OR

2 Describe sulphonated oils and fats in detail. **15**

3 Write short notes on any three of the following : **15**
(a) Silicon Surfactants
(b) Polyols
(c) Advantage and disadvantage of Non ionic surfactants
(d) Sulphosuccinats

SECTION - II

4 (a) Answer the following objective questions : **10**
(i) 2-ethyl hexyl sulphosuccinates is popularly known as _____
(ii) HLB value = _____ gives Antifoaming properties.
(iii) Define Surface tension.
(iv) Give one example of Wetting agent.
(v) Urea is used as a hygroscopic agent in printing True or False.
(vi) Give one example of Mild oxidizing agent.
(vii) Give one use of Reactive softener.
(viii) What is the function of Migration inhibitors.
(ix) What is the difference between leveling and Retarding agent.
(x) Give one example of sequestering agent.

(b) Describe cationic dye fixing agent in detail. **10**

5 (a) Explain mercerizing wetting agent. **10**
(b) Write note on Antifoaming agent. **5**

OR

5 Describe the roll of carrier in polyester dyeing in detail. **15**

6 Write short notes on any **three** of the following : **15**
(a) Leveling agents in Dyeing of Nylon
(b) Emulsification
(c) Silicon softener
(d) Cross-linking agents.
