



SF-8360

B. E. III (Sem. VI) (TP) Examination

May / June - 2011

Technology of Dyeing - II

(New Course)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. 3 (Sem. 6) (TP)

Name of the Subject :
Technology of Dyeing - 2 (New)

Subject Code No. : 8 3 6 0 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) Choose the correct alternative :
- (i) Following additive is added to make CDPET from PET.
- (a) 4-sulpho isophthalic acid
(b) 2-sulpho isophthalic acid
(c) 6-sulpho isophthalic acid
(d) None of the above
- (ii) Super micro fibres have following dimension
- (a) 1 dpf
(b) 0.5 - 1.0 dpf
(c) 0.2 - 0.5 dpf
(d) None of the above
- (iii) To obtain bright shades on nylon :
- (a) Acid dye is used
(b) Acid mordant dye is used
(c) Procynyl dye is used
(d) Metal complex dye is used
- (iv) Procynyl dye is a combination of
- (a) Acid + reactive
(b) Disperse + reactive
(c) Disperse + direct
(d) Acid + Disperse

- (v) More quantity of dye is added to achieve same shade with polyester :
- Textured polyester
 - CDPET polyester
 - Microfilaments polyester
 - Anionic dyed polyester
- (b) Answer in brief : 5
- Name any two machines used for dyeing of loose cotton fibres.
 - Enlist some material used in the construction of dyeing machine.
 - Which dye is used for barre - free dyeing of nylon ? Why ?
 - What is meant by back tan process ?
 - Why little carrier addition is beneficial in HTHP dyeing ?
- (c) Compare and contrast HTHP dyeing Vs carrier dyeing of polyester. 10
- 2** State the principle of dyeing machines. Describe construction, working of standfast molten metal dyeing machine. 15
- OR**
- 2** Describe in detail the different attempts and method of dyeing polypropylene. 15
- 3** Write short notes on any **three** of the following : 15
- Micro denier polyester
 - Polyester/cotton blend dyeing
 - Rapid dyeing of polyester
 - CDPET processing.

SECTION - II

- 4** (a) Answer the following objective questions : 10
- What is lake in wool dyeing ?
 - What is the function of salt in dyeing of wool with acid dye in acidic conditions ?
 - Give the pH range for super milling dyes.
 - 1:1 metal complex dye is dyed at pH_____.
 - What is back tanning process ?

- (vi) Name some of the dyes applicable on silk.
- (vii) Acid mordant dyes are also referred to as _____.
- (viii) Which pH is set for dyeing of acrylic with cationic dyes ?
- (ix) The critical temperature range for dyeing of acrylic fibre is _____.
- (x) Why silk dyeing is not generally carried out at boiling temperature ?
- (b) Discuss dyeing of nylon with acid and acid mordant dyes. **10**
- 5** (a) Discuss in detail application of cationic dyes on acrylic fibres. **10**
- (b) Describe dyeing of wool with procilan dye. **5**
- OR**
- 5** Discuss theory and mechanism of dyeing of wool fibre with acid dyes. Give dyeing method of this dye on the wool fibre. **15**
- 6** Write short notes on any **three** of the following : **15**
- (a) Dyeing of silk with acid dyes
- (b) Classification of acid dyes
- (c) Effect of acid on dyeing of wool with acid dye
- (d) Leveling agents for nylon.
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