



SE-8309

B. E. - III (Sem. V) (TP) Examination
May / June - 2011
Chemical & Physical Analysis of Textiles
(New Scheme)

Time :3 Hours]

[Total Marks : 100

Instructions :

नीचे दशांशक निशानीवाणी विगतो उत्तरवही पर अवश्य लिखनी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. - 3 (SEM. 5) (TP)

Name of the Subject :
Chemical & Physical Analysis of Textiles (New)

Subject Code No. : **8 3 0 9** Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

Section-I

Q.1.(a). Answer the following objective question.

(10)

- Name the solvent for Polyester.
- Acrylic is soluble in Formic acid, true or false?
- Starch size can be removed with hot water wash
- Name two methods for determination of melting point.
- What is melting point of Nylon 6,6?
- What are moisture regain values for cotton and viscose?
- Polyester and jute are thermoplastic fibres, true or false? Correct if false?
- Moisture regain of wool is _____ at 65% RH.
- Name two fibres soluble in DMF.
- Formaldehyde content is to be determined for _____ fabrics.

Q.1.(b).

- Discuss Factors affecting quantitative analysis of blends. (05)
 - Discuss the concept of sorption of water by various fibres. (05)
- Q.2. a) Give a detailed note on "Melting point and methods of it's determination. (08)
- b) Describe the methods for blend analysis of PET/cotton and Nylon/wool. (07)

OR

Q.2. Name the methods used for removal of moisture. Discuss any three of them in detail.

(15)

Q.3 . Write short notes. (Any Three)

(15)

- Determination of size content
- Influence of chemical treatments on textile fibres
- Significance and method of Burning test in identification of fibres
- Free formaldehyde in Textiles.

SECTION II

- Q4a.) Do as Directed [10]
- i. Name any two instruments used for measuring fibre fineness.
 - ii. Illustrate CRL & CRE conditions
 - iii. Stelometer is used to measure _____ & _____
 - iv. Illustrate Beam Balance Principle.
 - v. What is Drape of fabric.

Q4b.) With the help of neat sketch, explain briefly the Drapemeter. [10]

Q5a.) Describe how the wrap reel & an analytical balance are used for count measurement. [10]

Q5b.) What is bending length? How is related with flexural rigidity and Bending modulus. [05]

OR

Q5a.) With the help of neat sketch, explain briefly the Tearing strength Tester [09]

Q5b.) Briefly describe the rock bank twist tester. [06]

Q6.) Write Short Notes on : (Any three) [15]

- i. Hygrometers.
 - ii. Fabric thickness Gauge.
 - iii. Quadrant balance for finding GSM.
 - iv. Measurement of Air Permeability.
-