



JAYA GROUP OF INSTITUTIONS

Department of Textile Technology

B.Tech – IIIrd Yr – (INTERNAL ASSESSMENT - I) Model Exam – I

TT6401– CHAR OF TEXTILE FIBRE II

Date: 29/01/2015

Max. Marks : 100

Time : 180 mins

Part – A

(10x2=20)

1. Define torsional rigidity?
2. Give any two techniques for measurement of torsional rigidity.
3. Draw torque twist curve of nylon and acetate .
4. Give expression of total torque.
5. Write down specific torsional rigidity values for cotton, wool, polyester and nylon
6. Define flexural rigidity?
7. Write the formula used for calculating flexural rigidity?
8. Draw bending stress-strain curves for nylon and polyester?
9. Write down specific flexural rigidity values for viscose, silk, polyester and nylon
10. State Hook's law?

PART- B

(5*16 =80)

- 11) A) Explain the fibre properties about torsional rigidity.
(or)
b) Explain about the various measuring techniques for torsional rigidity.
- 12) A) discuss about various factors affecting torsional rigidity of various fibers.
(or)
b) Explain about Torsion and time relation breaking twist angle.
- 13) A) Discuss about torque – twist relations for various fibers.
(or)
b) Explain torsional rigidity and its relation to other fibre properties
- 14) A) Explain in detail about Flexural rigidity of fibres.
(or)
b) Discuss about flexural rigidity and compare with various fibres
- 15) A) explain about various measurement techniques
(or)
B) Discuss about Flexural rigidity and its relation to other fibre properties.

*****ALL THE BEST*****