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JAYA GROUP OF INSTITUTIONS –THIRUNINRAVUR

4<sup>TH</sup> SEM SEM-B.E/B.Tech

INTERNAL ASSESMENT(MODEL EXAMINATION –3)

Subject Name : Textile Characteristics of Fibres II

Date : 06/04/2015

Subject Code : TT6401

Branch: Textiles

Duration :180minutes

Max.Marks:100

Part A (10X2=20) Answer all the Questions:

1. Define torsional rigidity?
2. Give any two techniques for measurement of torsional rigidity.
3. Define flexural rigidity?
4. Write the formula used for calculating flexural rigidity.
5. Define refractive index?
- 6.State the principle of measuring refractive index.
- 7.Define birefringence.
8. What is directional friction effect of wool.
9. define power factor and loss factor.
10. write any one method of determining the electrical resistance of fibers

Part – B

(5x16=80)

11. a) Explain about the various measuring techniques for torsional rigidity

(or)

- b) i) Discuss about torque – twist relations for various fibers.
- ii) Explain torsional rigidity and its relation to other fibre properties.

12. A) Explain about Flexural rigidity of fibres and its various measurement techniques.

(or)

- b) Discuss about Flexural rigidity and its relation to other fibre properties.

13.A) Explain in detail about the measurement of refractive index of fibre.

(or)

b) Explain in detail about measurement of birefringence and the factors influencing birefringence.

14.a) ) Give detailed account of static and kinetic friction its measurement

(or)

b) Explain in detail about directional friction in wool?

15.a) Explain the various structural changes that takes place in fibres on heating.

(or)

b) Highlight the problems due to static electricity and discuss their remedial measures.

