



MACHAKOS UNIVERSITY

TVET END OF SEMESTER EXAM

CRAFT CERTIFICATE IN FASHION DESIGN AND GARMENT MAKING

END OF APRIL SEMESTER EXAM 2019

TEXTILE MATERIAL SCIENCE

TIME:2 HOURS

Answers all questions

1. Define the following terms

- Filament
- Hydrophobic
- Resiliency
- Electrostatic electricity
- Hygroscopic (10marks)

B .Outline the similarities and differences between regenerated fibers and synthetic fibers

(10marks)

2. Explain the process through which asbestos fibers undergoes.

(9marks)

b. Discuss the following properties of asbestos fibers

- Strength
- Absorbency
- Resistance to heat
- Resistance to chemicals (8marks)

c. State the uses of asbestos fibers

(3marks)

3. With the aid of diagrams discuss the three spinning methods used in synthetic fibers

(15marks)

b. Explain how nylon fibers behave when subjected to burning test

(5marks)

4.

With the aid of a diagram illustrate the longitudinal and cross-sectional views of silk, wool and nylon (15marks)

b. Explain the major differences between worsted and woolen fibers (5marks)

5. With the aid of a diagram illustrate the general classification of textile fibers and give three examples of each (20marks)