312335

12526

3 Hours / 70 Marks Seat No. | | | | | | | | |

Instructions – (1) All Questions are *Compulsory.*

(2) Illustrate your answers with neat sketches wherever necessary.

(3) Figures to the right indicate full marks.

(4) Assume suitable data, if necessary.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following : **10**

a) List out two essential properties of textile fibre.

b) State four Physical properties of cotton fibre.

c) State four end uses of Jute fibre.

d) State the chemical composition of Banana fibre.

e) Write names of four Amino acids present in the wool fibre.

f) State four end uses of silk fibre.

g) Define the term :

i) Fibre

ii) Filament

P.T.O.

Marks

2. Attempt any THREE of the following : **12**

a) Distinguish between Amorphous region and Crystalline region of fibre.

b) Illustrate the damages caused to cellulose while treating with acids.

c) Differentiate between cotton and Jute fibres based on their Morphology.

d) Describe the method for the determination of moisture content of fibres.

3. Attempt any THREE of the following : **12**

a) Describe test for the identification of maturity of cotton.

b) Write four domestic and industrial applications of Jute fibre.

c) Describe the Grease plate method for the determination of Wool fibre length.

d) Describe the desirable properties of textile fibres.

4. Attempt any THREE of the following : **12**

a) Explain the method of extraction of Banana fibre.

b) Give the classification of Textile fibres based on chemical nature and origin.

c) Explain the importance of Cystine Linkage in wool fibre.

d) With a neat sketch, describe the morphological structure of cotton.

e) Select a relevant method of detecting fire damage of silk fibre and explain the method.

Marks

5. Attempt any TWO of the following : **12**

a) Choose the relevant method of Retting of Jute fibres based on time required for the process.

b) With a neat sketch, explain the Morphological structure of Wool fibre.

c) Describe the method of determination of lignin content in flax fibre.

6. Attempt any TWO of the following : **12**

a) With the help of a neat and well labelled sketch, explain the importance of mesomorphous region of fibres.

b) Explain the process of sericulture for the production of Silk fibres.

c) Choose the relevant method of Retting and extraction of Sisal fibre based on the efficiency of the process.
