

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018.

TEXTILE FIBRES

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. List the botanical classification of cotton plant.
2. Define spun yarn.
3. State hackling.
4. List two natural protein fibre.
5. List the names of semi synthetic fibres.

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Explain the essential properties of textile fibre.
2. List any six hybrid Indian cotton and their properties.
3. Describe the cultivation of linen.
4. Sketch the microscopic appearance of jute and linen fibre.
5. Explain about the silk varieties.
6. Explain the process of carbonization of wool.
7. Show the flow chart of manufacturing of viscose rayon.

(5×6 = 30)

PART --- C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

- III (a) Show the classification of fibres based on their origin. 7
 (b) Explain the desirable properties of textile fibre. 8

OR

- IV (a) Explain the commercial cotton and their properties. 7
 (b) Explain the important chemical properties of cotton. 8

UNIT — II

- V (a) Explain the physical properties of Linen. 7
 (b) Describe the extraction of linen from the plant. 8

OR

- VI (a) Explain the process of separation of jute from the plant. 7
 (b) List the physical properties of jute. 8

UNIT — III

- VII (a) Describe the reeling of silk. 7
 (b) Discuss about de-gumming and weighting of silk. 8

OR

- VIII (a) Explain the classification of wool by fleece. 7
 (b) Show the microscopic structure of wool fibre. 8

UNIT — IV

- IX (a) Explain the manufacture of viscose rayon. 7
 (b) Explain the properties of acetate rayon. 8

OR

- X (a) Explain the preparation of Dope in the manufacture of acetate rayon. 7
 (b) Describe the Polynosic rayons and properties. 8
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