22247

21819

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

Instructions : (1) All Questions are *compulsory.*

(2) Answer each next main Question on a new page.

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

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE : **10**

(a) Enlist various types of sampling methods.

(b) Define moisture regain and moisture content.

(c) State the concept of 2.5% span length.

(d) Define 'Decitex".

(e) Define uniformity ratio.

(f) Define the slenderness ratio of fibre.

(g) Give the classification of trash.

2. Attempt any THREE : **12**

(a) State the importance of textile testing.

(b) State the importance of fibre length.

(c) Define the micronaire value and Denier of fibre.

(d) State the technical significance of fibre maturity in yarn manufacturing.

3. Attempt any THREE : **12**

(a) Explain the method to measure the atmospheric conditions.

(b) Describe the oil plate method to measure the length of fibre.

(c) Describe the microscope method to measure the fibre fineness.

(d) Define the fibre maturity and enlist the various method to measure it.

4. Attempt any THREE : **12**

(a) Give the moisture content value of following :

(i) Cotton

(ii) Viscose

(iii) Nylon

(iv) Polyester

(b) State the burning behaviour and solubility test for following fibre :

(i) Silk

(ii) Viscose

(c) Define the "Neps" and explain the template method to measure it.

(d) Draw the schematic figure of trash analyser and explain its working.

(e) Discuss the various parameters which affect the fibre maturity.

5. Attempt any TWO : **12**

(a) Explain the bare sorter method to determine the fibre length.

(b) Describe the air flow method to measure the fibre fineness.

(c) Explain the zoning technique of sampling.

6. Attempt any TWO : **12**

(a) Explain the principle of digital fibre group method.

(b) Explain the gravimetric method to measure the fibre fineness.

(c) Describe the caustic soda method to measure the fibre maturity.
