

22580

22223

3 Hours / 70 Marks

Seat No.

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- 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) 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) State the staple length and micron of top quality merino wool to produce 60^s Nm worsted yarn.
 - b) State two differences between jute and linen fibres.
 - c) Name the silk which is known as ‘golden silk’ fibre.
 - d) State density (glcc) and standard regain % of polyester and viscose fibres.
 - e) State one major fault in P/V blended yarns with reasons for the same.
 - f) State the lap weight and linear density of 100% acrylic lap in Blow room.
 - g) State two major features of worsted process.

- 2. Attempt any THREE of the following:** **12**
 - a) Classify Wool fibres based on sheep breed.
 - b) List various jute retting process and describe any one retting process of jute.
 - c) Describe silk degumming process for mulberry cocoons with sketch.
 - d) State the changes to be made on cotton blow room to process 100% viscose fibres justifying the changes suggested.

P.T.O.

- 3. Attempt any THREE of the following:** **12**
- a) Draw worsted card and label the parts.
 - b) Describe grilling process to produce woolen tops.
 - c) Compare woolen process with wasted process in terms of fibre characteristics and process sequences.
 - d) Draw Noble comb (Circular comber) to remove noil from worsted silvers and label the parts.
- 4. Attempt any THREE of the following:** **12**
- a) Select reeling process to produce mulberry silk filaments to produce 80 Denier yarn.
 - b) Sericulture is backbone of silk industry. Justify the statement.
 - c) Describe spun silk manufacturing process.
 - d) State the advantages of blended yarns.
 - e) Identify the objectives of wool and acrylic blending.
- 5. Attempt any TWO of the following:** **12**
- a) How does stress / strain curve, regain % and fibre fineness influence the blended yarn characteristics of PV blended yarns.
 - b) Identify the changes to be made on carding to process 100% acrylic 3.0 Den 42 mm staple fibre on cotton cards.
 - c) Why wool is blended with Viscose? State the machine parameters of Ring frame to produce 80:20 54 mm wool and viscose blended yarns.
- 6. Attempt any TWO of the following:** **12**
- a) Describe machine parameters of Ring frame to process wool : polyester (20:80) blended yarns. State the properties of the yarns to produce.
 - b) Compare properties of wool : polyester yarns with wool : viscose blended yarns.
 - c) Compare advantages of fleece blending with silver blending of polyester / cotton blends.
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