22677

12425

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

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

(2) Figures to the right indicate full marks.

(3) Assume suitable data, if necessary.

(4) Use of Non-programmable Electronic Pocket Calculator is permissible.

(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 concept of 4-point system.

(b) Give expression for % belt slippage.

(c) State the importance of machinery audit.

(d) State the concept of key variable.

(e) List 4-key parameters in warping process.

(f) Enlist various methods of fabric gradation.

(g) State the concept of online process control in weaving.

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

(a) State measures to control the productivity at winding.

(b) State the importance of process control in weaving process.

(c) State the concept of knot factor and give the mathematical expression for the same.

(d) Discuss the method of assess the productivity of indirect warping.

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

(a) State the objects of process control in weaving.

(b) Describe with sketch working of photoelectric type of yarn clearer.

(c) Explain the method to measure the ends breaks / 400 ends / 1000 meter in warping.

(d) Enlist and explain various factors that affects size pick up.

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

(a) Enlist various package defects produced at winding. Give causes and remedies for any two package faults.

(b) State the various package defects of direct warping and indirect warping.

(c) Describe the method to determine the efficiency of direct warping process.

(d) Suggest size recipe for 60^s cotton yarn for fine density fabric.

(e) State the process control parameters of splicer and tensioners.

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

(a) State the concept of optimum loom allocation, maximum operative efficiency in loom shed.

(b) Explain the method in brief for controlling the loom shed efficiency w.r.t. :

(i) Warp ends breaks

(ii) Weft end breaks

(iii) Stop due to other failure

(c) Draw the schematic diagram of Reed and express following parameters into it :

(i) Wire thickness

(ii) Air space

(iii) Baulk length

(iv) Gauge number

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

(a) Describe the method to measure the size losses and explain how to control it.

(b) Describe the snap study method to record the losses of efficiency in loom shed.

(c) Describe the quality of sized beam w.r.t.

(i) Density

(ii) Warp ends related issues

(iii) Selvedge

(iv) Formation of ridges
