22462

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.

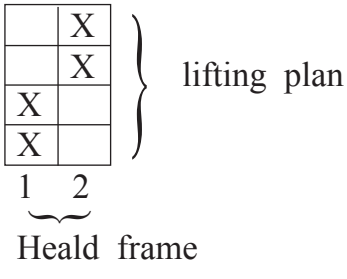
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

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

a) State the need of pirn winding department in weaving.

b) Draw the design for given peg plan if the draft is straight.



c) State the functions of shedding motions

d) State the functions of secondary motions and list them.

e) Draw the schematic figures of groved cam shedding and state its merits.

f) Give the mathematical expression to determine the dividend in take up.

g) List the various warp wise defects generated in power loom.

Marks

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

a) Define the chase length and give the expression to calculate the chase angle.

b) State the concept of heald count and reed count with relevant example.

c) State the concept of positive and negative shedding and write their merits.

d) Express the schematic figure of seven wheels take up mechanism.

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

a) Describe with sketch various types of heald wires and state their merits.

b) State the functions and importance of following parts in picking (over picking):

(i) Buffer

(ii) Chek strap

(iii) Picking stick

(iv) Picker

c) Describe with sketch working of cone over picking mechanism.

d) (i) State the importance of oscillating back rest.

(ii) Draw the schematic figures of negative let off mechanism.

e) (i) State the functions of temples.

(ii) List the various types of temples.

Marks

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

a) Describe with example steps to construct the draft for a given design. Also construct peg plan from the design and draft.

b) Calculate the weight of warp per meter if fabric is having 110 EPI, Width is 58 and yarn count is 40 Ne. (Assume crimp percentage 6%).

c) (i) State the objects of beatup mechanism.

(ii) Define the sley eccentricity and give the mathematical expression to find it.

d) Distinguish between seven wheels and five wheel take up mechanism.

e) Describe with sketch the working of mechanical warp stop motion.

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

a) Draw the schematic diagram of tappet shedding and explain the timing cycle of its.

b) State the causes and draw line diagram of following defects:

(i) Missing end

(ii) Float

(iii) Double end.

c) List the causes and remedies of following machine defect:

(i) Thick place

(ii) Starting mark

(iii) Emery roller marks.

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

a) Calculate the weight of bunch if bunch length is three yards and count of weft. is 40^s Ne.

b) Describe with sketch the driving arrangement of plan power loom.

c) Calculate the loom production in yards/day if loom is running with 150 picks per minute end p.p. m is 15 (Assume eff of m/c is 70%).