17345

14115

3 Hours/100 Marks Seat No. | | | | | | | | |

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

(2) Illustrate your answers with ***neat*** *sketches* ***wherever*** *necessary.*

(3) Figures to the ***right*** *indicate* ***full*** *marks.*

(4) Assume suitable data, ***if necessary****.*

MARKS

1. Attempt **any ten** : **20**

a) State the objects of beam warping.

b) What is the objective of tensioning devices ? List down various types of tensioning devices used on warping machine.

c) State the function of lease rod on sectional warping machine.

d) List down different types of sheds formed in weaving.

e) State the advantages of dobby shedding mechanism over tappet shedding mechanism.

f) Differentiate between single lift dobby and double lift dobby.

g) Which types of fabrics are woven on cross burden dobby looms ? Explain in brief.

h) State the objectives of drop box mechanism. List down various types of drop box motions.

i) State the importance of safety device on drop box mechanism. Give an example of the same.

MARKS

j) What is weft mixing ? How it is done ?

k) State the objective of card saving devices.

l) State the principle of Jacquard shedding.

m) List down various types of Jacquard you are aware of.

n) State the advantages of centre tie or point tie over repeating tie.

o) List down various types of harness ties you are aware of.

2. Attempt **any four** : **16**

a) Draw diagram of direct warping (beam warping) machine and label the parts.

b) List down various types of creels used on beam warping machine. State their relative merits and demerits.

c) Draw diagram of passage of warp through sectional warping and label the parts.

d) Explain stop motion on beam warping machine.

e) State salient features of modern beam warping machine.

f) Calculate the production of beam warping machine in yds/shift and Kg/shift from following data :

Warping speed – 600 yd/shift

Efficiency – 60%

Number of ends on beam = 500

Count of yam warped = 30^s cotton

Calculate the number of beams produced per shift if length of warp on each beam is 14400 yds.

MARKS

3. Attempt **any two** : **16**

   a) Draw diagrams of different sheds formed by various dobby shedding mechanisms. State their relative merits and demerits.

   b) Explain the working of climax dobby with the help of a neat diagram.

   c) Explain the working of cross border dobby with the help of a neat diagram.

4. Attempt **any two** : **16**

   a) With the help of a neat diagram explain the working of Rotary dobby.

   b) i) Explain the method of lattice pegging of right hand dobby assuming your own peg-plan.

      ii) Compare conventional dobby with cam dobby.

   c) Describe the working of cow-burn and peck drop box motion with the help of a neat diagram.

5. Attempt **any two** : **16**

   a) Draw diagram of different card used on drop box mechanism (Indicate the type of box change in front of each diagram). Prepare a pattern chain of cards (without card saving device) assuming your own weft pattern.

   b) Explain the working of pick-at-will box motion with the help of a neat diagram.

   c) Explain the working of double lift double cylinder jacquard with the help of a neat diagram.

6. Attempt **any four** : **16**

   a) Explain the type of shed formed in double lift single cylinder jacquard. What is its advantages.

   b) Write a detailed note on figuring capacity of jacquard.

MARKS

c) Draw diagram of Norwich tie and explain the same.

d) What is casting out in jacquard ? Briefly explain how it is done giving an example.

e) Describe the method of transferring an artist's sketch on jacquard point paper.

f) State features of electronic jacquard. State advantages of electronic jacquard over mechanical jacquard.

g) What is count of point paper in jacquard designing ? How it is decided ? What is its importance ?
