Instructions:
1. Attempt any SIX Questions out of which Q.1 is compulsory
2. Answer each next main question on a new page
3. Figures to the right hand side indicates full marks
4. Illustrate your answers with sketches and flow charts wherever necessary
5. Use of non-programmable electronic pocket calculator permissible
6. Mobile and any other communication devices and books etc. are not allowed in exam hall
7. Assume suitable data wherever necessary

Q. 1: a) Filling the blanks
i) Fast Reed is the example of ....................... mechanism.
ii) Individual warp ends are controlled in ............... Shedding.
iii) Back Rest is a part of ....................... 
iv) 40s Ne = ............. Tex.

b) Match the following
i) Rubber Squeeze Roller   a) Weaving
ii) V Creel             b) Winding
iii) Traverse Drum      c) Sizing
iv) Stock Port System  d) Warping
v) Back Rest            e) Reed Count

Q. 2
a) Describe the recent developments in High Speed Warping Machine
b) Describe the working principle of latest Autoconer warp winding machine

Q. 3
a) Describe the various sizing ingredients used in sizing with their purpose
b) The length of yarn wound in 6 mins. On a winding machine is 3000 meters. If the diameter of the winding drum is 76.2 mm, calculate the r.p.m. of the winding drums.
Q. 4  
   a) Describe the Under-Pick mechanism with suitable line diagram.  08  
   b) Describe the function of Picking Motion with suitable line diagram.  08  

Q. 5  
   a) Calculate the approximate weight of warper’s beam in Kgs, if length of  08  
      Warp is 30000 meters, count of warp is 40 Ne & total ends is 720.  
   b) Describe the passage of yarn on direct warping machine  08  

Q. 6  
   a) Calculate the approximate length of warp yarn on weaver’s Beam  08  
      in Mtrs, if count of warp is 30 Ne & total ends are 10240 weighing 490 kgs.  
   b) Describe the latest developments & features of multi cylinder Sizing machine  08  

Q. 7  
Draw the following designs with draft & peg plan (Use graph paper)  
   i) 5 end sateen  
   ii) Ordinary Honeycomb  
   iii) 3/1 Twill  
   iv) Huck a Back  

Q. 8: Write short note on the following  16  
   a) Yarn numbering system  
   b) Drop Box Motion  
   c) Loom Temple  
   d) Dobby Mechanism