THE TEXTILE ASSOCIATION (INDIA)
A.T.A PART III EXAMINATION – 2019
PAPER – A3.0B
MODERN FABRIC MANUFACTURING

Instructions:
1. Attempt six questions out of which Q.1 is compulsory
2. Answer each next main question on new page
3. Figure to the right indicate full marks
4. Illustrate your answer with sketches and flow chart whenever necessary
5. Use of non-programmable electronic pocket calculator permissible
6. Mobile and any other communication devices are not allowed in exam hall
7. Assume suitable data wherever necessary

Q1. Answer the following
   a) The major application of warp knitted fabric is ____________
   b) On ___________ Jet loom more than one nozzles are used
   c) __________ loom creates less noise
   d) The means of weft insertion in projectile is called as ________
   e) In Gabler system ________ transfer of yarn takes place.
   f) Components of latch needle are
   g) The most popular fabric manufacturing technology is ____________
   h) Warp cover factor can be obtained if the values of following parameters are known
   i) __________ loom is not suitable for very weak yarn.
   j) The best suited technology among the following for Geotextiles would be

Q2. Answer the following questions.
   a) Explain the picking mechanism of Water jet loom machine.
   b) Differentiate between Rapier and Projectile loom.
   c) List down the factors affecting pneumatic weft propulsion in Air jet loom.

Q3. What are the benefits of monitoring and control of weaving machines by microprocessor?

Q4. Answer the following questions.
   a) Write a short note on drying of fabric in water jet weaving m/c, quality of water needed and water jet width.
   b) Explain the path of yarn of weaving m/c in warp and weft direction (water jet looms).

Q5. Explain the driving mechanism of flexible rapier machine.

Answer the following questions

Q6. a. Mention the Quality parameters for 40s combed warp yarn suitable for Shuttleless looms.
   b. State any two important technical aspects in Sizing of yarn meant for Shuttleless looms.
   c. What are the function of Eye cutter and Temple cutter in an automatic Pirn change loom?
   d. Name different types of feelers used in Auto looms

Q7. Give an account of weaving of filament yarns
Q8 Answer the following questions

a. What are the important aspects in the preparation of open-end yarns for weaving? 8
b. List down the various types of defect found in woven fabric. 8