TEXTILE ASSOCIATION (INDIA)
G.M.T.A. EXAMINATION-2018
SECTION: C PAPER — C.3
TEXTILE ENGINEERING MECHANICS

Date: 24.12.2018 Marks: 100 Time: 10.00 am to 1.00 pm

Instructions: 1. Attempt SIX questions out of which Q1 is Compulsory
2. Answer each next question on new page
3. Figures to the right indicate full marks
4. Illustrate your answers with sketches and flow chart wherever necessary
5. Use of nonprogrammable electronic pocket calculator permissible
6. Mobile and any other communication devices are not allowed in the exam hall
7. Assume suitable data wherever necessary

Q.1 Attempt any four of the following:
(a) Mention five applications of Flat belts
(b) List down the combinations of motions of cam and follower.
(c) Explain Back lash in Spur gears
(d) Explain the difference between speed and velocity
(e) What is Worm and Worm wheel? Explain with sketch.
(f) What is stepped pulley and where it is used?

Q.2 What are the advantages and disadvantages of chain drive compared to belt and gear drives?

Q.3 What is the function of Clutch? Name the types of Clutches and explain in detail about Single Friction Disc Clutch.

Q.4 Explain the relationship between shuttle velocity and loom Speed/productivity.

Q.5 What are the different variable speed drive mechanisms used in Blow room, Roving and Ring Spinning. Explain with sketches.

Q.6 What is yarn tension in Balloon? Explain the measurement of yarn tension in Ring Spinning?

Q.7 Illustrate Spur Gear Sketch and denote various aspects used in designing of Spur gear.

Q.8 List down different feed regulating mechanisms in blow room.

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