THE TEXTILE ASSOCIATION (INDIA)
C.M.T.A. EXAMINATION-2015
SECTION: E PAPER -E-2

ENERGY ENVIRONMENT & EFFICIENCY IN TEXTILES

Date: 27.12.2016       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

Q1  a  Discuss effluent discharge standards for inland surface water 10
     b  Discuss WHO, ISO standards for the criteria of raw water 10
        quality.

Q2  a  Discuss the central pollution control board norms for waste 08
     water discharge.
     b  Compare the central pollution control board norms with 08
        international norms.

Q3  a  Discuss waste water treatment with special reference to primary 08
     treatment.
     b  Write a note on recycling of waste water. 08

Q4  a  State the standards of industrial water with special reference to 08
     textile wet processing.
     b  Define Coagulation and flocculation processes in effluent 08
        treatment and describe the resultant waste water in terms of its
        suitability to further treatment/disposal

Q5  Give a detailed account of energy conservation strategies in a 16
    composite textile unit

Q6  Give a brief account of different types of energy sources 16
    involved in the textile industry.

Q7  Discuss energy auditing processes in a composite textile mill. 16

Q8  Discuss the different types of pollution noticed in various 16
    stages of manufacture of textiles.