THE TEXTILE ASSOCIATION (INDIA)
GMTA EXAMINATION – 2018
SECTION – D PAPER – POD.1
COLOUR THEORY AND COLOUR MATCHING

Date: 27.12.2018
MARKS: 100
Time: 02.00 pm to 05.00 pm

Instructions:

1. Attempt any Six questions out of which Q.1 is Compulsory
2. Answer each next question on new page
3. Figures to the right indicate full marks
4. Illustrate your answers with neat sketches & flow charts wherever necessary
5. Use of non-programmable electronic pocket calculator is permissible
6. Mobile and any other communication devices are not allowed in the Examination hall.
7. Assume suitable data wherever necessary

Q1. Match the following by choosing most appropriate option. 2X10=20

1. Tristimulus values  a. True
2. Hunter lab      b. No ability to see second colour
3. Monochromatic   c. Opposite colours
4. Colour of light source influence objects d. Colour difference
5. Black & White   e. Is a defect
6. ΔE              f. Tertiary colours
7. Block           g. Secondary colours
8. Metamerism      h. more
9. Green           i. L, a, b values
10. Chances of colour blindness in men  j. Less

Q2. Explain following terminology related to colour perception  16

a) Standard observer
b) Object
c) Standard light
d) Metamerism

Q3. With line diagram explain logic behind operation of computer colour matching instrument. Explain 2° and 10° visual effect.  16

Q4. What do you mean Kubelka-Monk constant and how do you measure colour strength of known material using reflectance value?  16

Q5. How do you measure whiteness and yellowness in the fabric? Define the fluorescence, Whiteness Index and yellowness index.  16
Q6. What is colour blindness and what are the possible errors in case of human observation. Explain mono and bi-chromatism.

Q7. What is chromatic adoption? Explain chromatic adoption theory.

Q8. What is tint and shades? Explain Complimentary and opposite colour, and also explain secondary and tertiary colour combinations.