Roll No. ..... Total Pages : 03

J-21-0012

B. Tech. EXAMINATION, 2021

Semester V (CBCS)

TEXTILE CHEMICAL PROCESSING-II

TE-503

Time : 2 *Hours* *Maximum Marks :* 60

The candidates shall limit their answers precisely within 20 pages only (A4 size sheets/assignment sheets), no extra sheet allowed. The candidates should write only on one side of the page and the back side of the page should remain blank. Only blue ball pen is admissible.

Note : Attempt *Four* questions in all, selecting *one* question from any of the Sections A, B, C and D. Q. No. **9** is compulsory.

Section A

1. Explain the following in brief :

(a) Additive and subtractive color theories **5**

(b) What are CIELAB Values ? **5**

(c) What are advantages and limitations of computer color matching systems ? **5**

2. Classify reactive dyes. Explain the dyeing process of reactive dye on cotton fabric with suitable examples. **15**

Section B

3. Explain the dyeing procedure of P/C blend with disperse/Vat dyes for 2% Shade. **15**

4. How dyeing of denim is different from normal dyeing ? Explain the dyeing technology of denim with indigo dye ? **15**

Section C

5. Explain various styles of printing with their advantages and limitations. **15**

6. Explain the working of flat bed screen printing along with its advantages and limitations. **15**

Section D

7. How will you identify vat dye and reactive dyes on cotton fabrics ? Explain. **15**

8. Why washing is important in textile wet processing ? Explain counter current flow with its merits and demerits. **15**

(Compulsory Question)

9. (a) Define hue, value and chroma.

(b) Name various ingredients of printing paste.

(c) What are the differences between dyes and pigments ?

(d) Name the yarn requirements for quality denim fabrics.

(e) What is centrifuging ?

(f) On which fabric transfer printing is possible ?

(g) What is the function of salt in reactive dyeing ?

(h) Define % shade in dyeing.

(i) Write Kubelka-Munk equation.

(j) What is the use of stenter ? **10×1.5=15**