

Register Number:.....



KUMARAGURU
college of technology
character is life

B.TECH DEGREE EXAMINATIONS: NOV/DEC 2022

(Regulation 2018)

Fifth Semester

Fashion Technology

U18FTI5201T: Textile Chemical Processing

COURSE OUTCOMES

- CO1:** Acquire knowledge and explain the chemical processing of cotton and blended materials.
- CO2:** Summarize the suitable process to process the fiber, yarn, and fabrics through preparatory and dyeing processes.
- CO3:** Analyze the parameters and deciding the recipes for chemical processing of different materials.
- CO4:** Acquire Knowledge and Analyze the parameters for printing techniques
- CO5:** Testing and evaluation on the eco-friendly processes and the effluent treatments.
- CO6:** Summarize the pollutants, banned and toxic chemicals and amines.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions: -

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

- | | | |
|--|-----|-------------------|
| 1. Distinguish the process of mercerization from bleaching | CO1 | [K ₂] |
| 2. Summarize the function of OBA | CO1 | [K ₂] |
| 3. Examine the advantages and disadvantages of garment dyeing process | CO2 | [K ₂] |
| 4. Interpret the mechanism of dyeing process | CO3 | [K ₂] |
| 5. Quote the term substantivity | CO3 | [K ₂] |
| 6. Summarize the process involved in tie & dye style of printing | CO4 | [K ₂] |
| 7. Infer the various special prints used in printing | CO4 | [K ₂] |
| 8. Extract the role of tertiary treatment of effluent treatment | CO5 | [K ₂] |
| 9. Enlist the properties required for thickeners used in printing | CO4 | [K ₂] |
| 10. Outline the role of secondary effluent treatment in wet processing | CO5 | [K ₂] |

Answer any FIVE Questions: -
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

- | | | | | | |
|-----|----|---|----|-----|-------------------|
| 11. | a) | Interpret the working mechanism of gas singeing process with necessary sketches and compare its merits & demerits | 16 | CO1 | [K ₃] |
| 12. | a) | Illustrate the mechanism of desizing process through enzymes with necessary sketches | 16 | CO2 | [K ₄] |
| 13. | a) | Correlate the dyeing of cotton fabrics with direct dyes on jigger dyeing machine | 16 | CO2 | [K ₄] |
| 14. | a) | Prioritize the merits & demerits of direct, discharge & resist style of printing | 8 | CO4 | [K ₃] |
| | b) | Categorize in detail about ingredients of print paste with their functions used in printing | 8 | CO3 | [K ₄] |
| 15. | a) | Infer the mechanism of transfer printing process and compare its merits & demerits | 16 | CO4 | [K ₄] |
| 16. | a) | Conclude the role of primary textile effluent treatment process carried out in wet processing | 8 | CO5 | [K ₄] |
| | b) | Perceive the concept of computer color matching | 8 | CO3 | [K ₅] |
