



	A	B	C	D
a)	ii	i	iii	iv
b)	iii	iv	ii	i
c)	ii	iv	i	iii
d)	iii	i	ii	iv

5. Assertion (A): Durable fragrance finishing can be done by microencapsulation method      CO3    [K<sub>4</sub>]  
Reason (R): Volatile fragrance components are covered by shell material in micro capsules.

- |   |   |
|---|---|
| a) Both A and R are Individually true and R is the correct explanation of A | b) Both A and R are Individually true but R is not the correct explanation of A |
| c) A is true but R is false   | d) A is false but R is true   |

6. Which of the following statement(s) is/are false?      CO3    [K<sub>4</sub>]

- In microcapsule, core component is released by friction, pressure and change of temperature
- Plasma is called as fourth state of matter
- Nano particles can be encapsulated and applied on textiles
- Plasma is not an eco friendly process

- |       |           |
|-------|-----------|
| a) i  | b) iii    |
| c) iv | d) iii.iv |

7. -----is dry compound coating technique      CO3    [K<sub>1</sub>]

- |                 |                    |
|-----------------|--------------------|
| a) Knife roller | b) Gravure coating |
| c) calendering  | d) Dip coating     |

8. Match the following      CO3    [K<sub>3</sub>]

- |                        |  |
|------------------------|--|
| A. V type knife        | i. prevention of spitting                  |
| B. bull nosed knife-   | ii. greater penetration with wedge effect  |
| C. shoe knife          | iii. Heavy coating with little penetration |
| a) A- i, B-ii, C- iii, | b) A- ii, B-iii, C- i,                     |
| c) A- iii, B-i, C- ii, | d) A- ii, B-i, C- iii,                     |

9. Which one is wrong statement?      CO5    [K<sub>4</sub>]

- |   |  |
|---|--|
| a) Enzymes are biodegradable                  | b) Kerosene is non eco friendly chemical |
| c) Super critical carbondioxide uses no water | d) Chlorine bleaching is eco friendly    |

10. Match list I with List II      CO4    [K<sub>3</sub>]

List I	List II
A. Softeners	1. toxic
B. Fats and waxes	2. difficult to bio degrade
C. Heavy metals	3. readily biodegradable

	A	B	C
(a)	2	3	1
(b)	1	2	3
(c)	2	1	3
(d)	3	1	2

**PART B (10 x 2 = 20 Marks)**

- |  |     |                   |
|--|-----|-------------------|
| 11. List out the techniques to reduce the use of salt for reactive dyeing. | CO1 | [K <sub>2</sub> ] |
| 12. State the principle of Supercritical carbon dioxide dyeing.            | CO2 | [K <sub>2</sub> ] |
| 13. Enlist the applications of enzymes in finishing.                       | CO1 | [K <sub>2</sub> ] |
| 14. Name any four chemicals used for UV repellent finishing.               | CO3 | [K <sub>1</sub> ] |
| 15. State the advantages of Nano finishing of textiles.                    | CO4 | [K <sub>2</sub> ] |
| 16. Differentiate between micro capsules and nano particles.               | CO3 | [K <sub>4</sub> ] |
| 17. State the applications of coating of textiles.                         | CO5 | [K <sub>3</sub> ] |
| 18. Differentiate drying and curing process.                               | CO2 | [K <sub>4</sub> ] |
| 19. Why do formaldehyde based easy care finishes are banned?               | CO4 | [K <sub>3</sub> ] |
| 20. List out the heavy metals that are to be avoided in textiles.          | CO4 | [K <sub>2</sub> ] |

**PART C (6 x 5 = 30 Marks)**

- |   |     |                   |
|---|-----|-------------------|
| 21. Highlight about the low liquor dyeing techniques that can be practiced by processing industry.        | CO1 | [K <sub>2</sub> ] |
| 22. Reactive dyes are dominant choice of colorants. Update the recent developments made in reactive dyes. | CO2 | [K <sub>3</sub> ] |
| 23. Explain how normal cotton fabric can be converted into flame retardant fabric.                        | CO3 | [K <sub>2</sub> ] |
| 24. Classify different types of Plasma.   | CO2 | [K <sub>4</sub> ] |
| 25. Highlight on advances in drying and curing techniques.  | CO2 | [K <sub>3</sub> ] |
| 26. Describe in detail about the pollution problem caused by Textile processing.                          | CO5 | [K <sub>4</sub> ] |

**Answer any FOUR Questions**

**PART D (4 x 10 = 40 Marks)**

- |   |     |                   |
|---|-----|-------------------|
| 27. The future of the digital printing is very bright due to its special nature like sample production, competitive nature to normal print etc” Substantiate the statement with data. | CO1 | [K <sub>4</sub> ] |
| 28. Summarize on recent trends in easy care finishing of cellulose.   | CO3 | [K <sub>2</sub> ] |

- |  |     |                   |
|--|-----|-------------------|
| 29. Compare and contrast plasma , nano and microencapsulation finishing methods    | CO2 | [K <sub>4</sub> ] |
| 30. With diagrams, explain spray and foam coating techniques for textiles          | CO3 | [K <sub>2</sub> ] |
| 31. Examine the recent developments in eco friendly dyeing, printing and finishing | CO5 | [K <sub>4</sub> ] |

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