

Roll No. _____

Date _____

BT-7/BI3: 9716
BT-17: Advanced Chemical Processing

Time: 3 hrs]

[Max. Marks: 100

Note: Attempt five questions in all selecting at least one question from each unit. All questions carry equal marks.

Unit I

Q.No. 1(a) How are eco-friendly enzymes used in wet processing? How are enzymes used for stone washing jeans?

(b) Discuss in brief about continuous dyeing. How continuous dyeing found to be more useful for woven fabric?

Q.No. 2(a) Discuss in details regarding grading and methods to determine fastness relating to

(i) Washing (ii) hot pressing treatment

Unit II

Q.No. 3(a) Write note on zero formaldehyde easy-care finishes. How nanoparticles help in development of these finishes?

(b) Discuss in details about novel printing techniques like Digital printing.

Q.No. 4 Discuss in details about "Antimicrobial finishes of textiles". How are cellulose-chitin blends helpful in making such textiles?

(b) Discuss in brief about low wet pickup techniques (i) pad vacuum extraction (ii) air jet-assisted squeeze rolls

Unit III

Q.No. 5(a) What is difference between light source and illuminator?

(b) Describe the term CIE Illuminants. Explain the term White point. What are different types of illuminants?

Q.No. 6 Write a detailed note on Kubelka-Munk equation in reflection. Explain your answer through drawing.

(b) Under what condition this theory is applicable to Paper?

Unit IV

Q.No. 7. Describe spectroscopic curves and their relationship to perceived colour.

(b) Discuss in brief principle and applications of spectrophotometer.

Q.No. 8(a) What is computer aided matching. Discuss some of its applications.

(b) Discuss in brief Munsell system of colour specification.