

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai - 600 044.

B.Sc.Chemistry - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - VI

**24UCHET6B02 - Leather Chemistry**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

**Section B**

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. Explain the structure and composition of hides and skins.
2. Describe the basic principle involved in pre-tanning processes such as soaking and liming.
3. Classify vegetable tanning materials and discuss their chemistry.
4. Discuss the process of fixation in vegetable tanning.
5. Explain the chemistry of chrome tanning liquids and their hydrolysis.
6. Analyze the factors governing chrome tanning.
7. Describe the chemical methods of curing and preservation of hides and skins.
8. Explain the different types of tannery effluents and their effects on water pollution.

**Section C**

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. Discuss the anatomy of protein constituents of leather and their significance in tanning.
10. Explain the manufacture and uses of synthetic tannings with examples.
11. Discuss the chemistry of tanning like Al and Zr salts.
12. Examine the principles of analytical methods used in curing, liming, deliming, and pickling.
13. Analyze the sources and treatment methods of tannery effluents.

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