

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

**22UCHET6003 - Applied Chemistry**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### Section B

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

1. Explain hydrothermal synthesis of nanoparticles.
2. Discuss the applications of nano particles in various field.
3. What is the need for green chemistry?
4. Explain any two green synthesis reactions.
5. Write the preparation and uses of  
(a) Malachite green                      (b) Alizarin
6. Define pigments. Explain its types and characteristics with an example.
7. Explain about biodegradable polymers and write their role.
8. Explain Ziegler – Natta polymerization with suitable example.

### Section C

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

9. (a) Discuss the preparation, properties and uses of nano composites.  
(b) Explain the sol – gel method of synthesis of nano particles.
10. Write the 12 principles of green chemistry.
11. Explain complex ometric titration using EDTA.
12. Give the preparation and uses of  
(a) Polystyrene                      (b) PVC                      (c) PMMA
13. Define paint. How paint is manufactured? Write the constituents, properties and functions of paints.

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