

9. Write notes on following:

(a) Synthesis and applications polymer per acid  
(8)

(b) Synthesis and applications of tin chloride resins.  
(7)

10. (a) What is difference between Hide and Skin tanning?  
(5)

(b) Explain reverse tanning and Vegetable tanning?  
(10)

APRIL/MAY 2018

**MCH24A — GREEN CHEMISTRY**

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) In organic transformation, how will you prevent the by-products and waster materials?

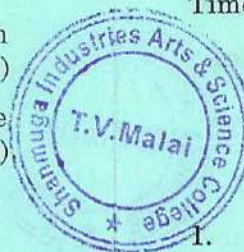
Or

(b) Why the products should be biodegradable? Explain some examples which biodegradable in nature.

2. (a) Describe the principles of sono chemistry?

Or

(b) Why microwave mediated organic transformations are rapid in nature? Explain.



3. (a) What are the applications of ionic liquids in organic synthesis?

Or

- (b) Explain the preparations and applications of sulfonazide polymer.
4. (a) How PTC's are assisted the following conversions:
- (i) Cyanide from alkyl helide
  - (ii) Azides from alkyl helide.

Or

- (b) Give the reactions and advantages of phase transfer catalysist using the following name reactions.
- (i) Benzoin condensation
  - (ii) Wittig reaction.
5. (a) What are the Eco friendly pesticides and insecticides? Explain.

Or

- (b) Explain chrome tanning and fat liquoring.

SECTION B — ( $3 \times 15 = 45$  marks)

Answer any THREE questions.

6. (a) How do you design safer chemicals synthesis? Explain with suitable examples. (8)
- (b) Explain the role of catalysts in minimizing energy and maximizing the final products. (7)
7. (a) Describe the principles of microwave assisted organic reactions. (8)
- (b) Explain oxidations and coupling reactions assisted by Ultrasound. (7)
8. (a) Discuss PTC assisted Willamson and Micheal reactions with two examples each. (10)
- (b) What are the types of PTC? Give one example for each types. (5)

