

## CHMDC 124 (T+P): Industrial Chemistry

**Credit – (2T+2P), Theory Hours – 30, Practical Hours – 60**

### Course outcomes

**At the end of the course, the student will be able to-**

**CO 1:** know about industrial products, their preparations, manufacturing, uses and market trends

**CO 2:** applying the knowledge understand, analyse and solve the problem with environmental impact

| CO   | PO-1 | PO-2 | PO-3 | PO-4 | PO-5 | PO-6 | PO-7 | PO-8 |
|------|------|------|------|------|------|------|------|------|
| CO-1 | 3    | 2    | 1    |      |      |      |      | 1    |
| CO-2 | 3    | 2    | 1    | 1    | 1    |      | 1    | 1    |

### UNIT 1 Explosives and Pesticides

**[15 hors] [25 marks]**

**[A] Explosives:** Introduction, classification, synthesis and uses of Tetryl, PETN, HMTA, RDX, Nitro glycerine

**[B] Pesticides:** Introduction, classification, synthesis and uses of Malathione, Parathione, Aldrin, Methoxychlor

### Unit 2 Drugs and Dyes

**[15 hors][25 marks]**

**[A] Drugs:** Introduction, classification, synthesis and uses of Aspirin, Paracetamol, Phenacetin, Antipyrin, Benzocaine, tolbutamine, n-hexyl resorcinol

**[B] Dyes:** Introduction, General classification, synthesis and uses of Malachite green, Indigo, Alizarin, Congo red, Eosin

### REFERENCE BOOK

1. 'Shreve's Chemical process Industry' by George T. Austin, 2017
2. 'Organic chemistry' by I. L. Finar, Volume 2, Pearson Education, 1996
3. 'Burger's medicinal chemistry and drug design' (5/e) 1997, vol 1 to 5 edited by Manfred E. Wolt (John Wiley and sons Mc. New York)
4. 'Medicinal chemistry' by Ashutoshkar
5. 'Principles of medicinal chemistry' by William A. Foye (ied), Lea and Febiger (Philadelphia)