

ODISHA STATE BOARD OF PHARMACY

27/01/2023

D. Pharm Part (I)

E. R. 2020

2022(I)

**DO NOT WRITE ANYTHING ON YOUR QUESTION PAPER EXCEPT YOUR ROLL NO.  
QUESTION PAPER CONTAINING ANYTHING WOULD BE TREATED AS MALPRACTICE**

**PHARMACEUTICAL CHEMISTRY**

**Full Mark -80**

**Time -3 hrs**

**1. Answer any six .**

[6x05=30]

- Define Acid-Base Indicators & describe in details about the indicator theory with suitable Examples?
- Describe the principles involved, procedure & application of Mohr's Method?
- Mention the chemical structure, chemical name, uses and brand names of followings –
  - Glibenclamide
  - Chloroquine Phosphate.
- What is quality control? Describe the importance of quality control?
- Write the detail about chemistry of aluminium hydroxide gel?
- Classify anti-neoplastic agents with suitable examples. Write the structure, chemical name, popular brand name of Cyclophosphamide and Fluorouracil.
- Classify nonsteroidal anti-inflammatory agents (NSAIDs). Write the structure, chemical name and popular brand name of i) Ibuprofen ii) Paracetamol

**2. Answer any ten questions.**

[10x03=30]

- Write a short note on Mouth Washes?
- Define Dental Fluorosis and Briefly discuss the role of Fluorides as an anti-carries agent?
- Define Haematinics, mention some official compounds and discuss the role of ferrous fumarate as an ideal compound?
- Define Sedative & Hypnotics. Mention the Chemical Structure & Chemical Name of Diazepam and Phenobarbital
- Write about the uses, storage & incompatibility of light kaolin?
- Write the structure of Metformin, Verapamil and Alprazolam?
- How raw materials contribute impurities to the finished product. Explain.
- What are the advantages of BaSo<sub>4</sub> reagent over BaCl<sub>2</sub> in the limit test for sulphate.
- Write the principle of limit test for chloride.
- Write a note on DOT therapy in tuberculosis.
- What are anti-hypertensive agents? Write the structure and chemical name of Propranolol.

**3. Answer all questions in the following sections. Each carries ONE mark**

[20x1=20]

**A) Define the followings:**

- Normality
- Conjugate Acid and Conjugate Base with Suitable Examples
- Hemosiderosis
- Oxidant and Reductant with examples
- Cathartics
- Astringent
- Complexometric Titration
- Impurity
- Self indicator with example
- Antidepressant

**B) Write the chemical formula & Uses of followings**

- Dapsone
- Magaldrate
- Potassium Permanganate
- Bleaching powder
- Green Vitriol

**C) Write down the structure & numbering.**

- Purine
- Phenothiazine
- Imidazole
- Pyrimidine
- Indole

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