



SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

Coimbatore -641035

COURSE NAME : Pharmaceutical Inorganic Chemistry (BP 104 T)

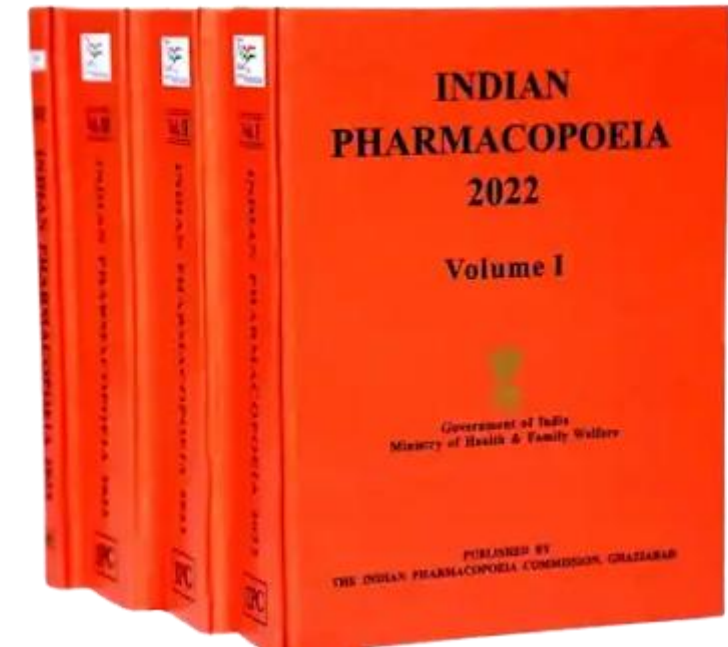
I YEAR / I SEM

TOPIC 1 : Origins of Pharmacopoeia



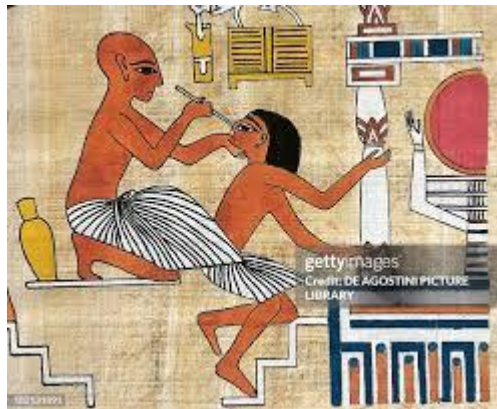
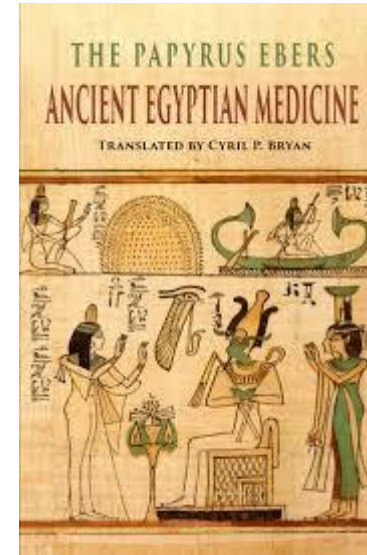
Definition & Purpose

- A pharmacopoeia is an official, authoritative compendium published by a recognized authority, typically a government or professional body, that establishes standards for the identity, quality, purity, strength, and packaging of pharmaceutical substances and medicinal products.
- It serves as a legal standard for ensuring the consistency and safety of drugs, guiding manufacturers, pharmacists, and regulatory bodies in maintaining high quality medicines.
- The primary purpose is to protect public health by minimizing variations in drug composition, preventing adulteration, and specifying analytical methods for quality control.



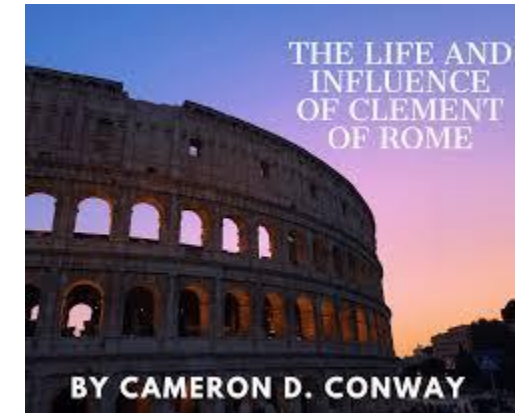
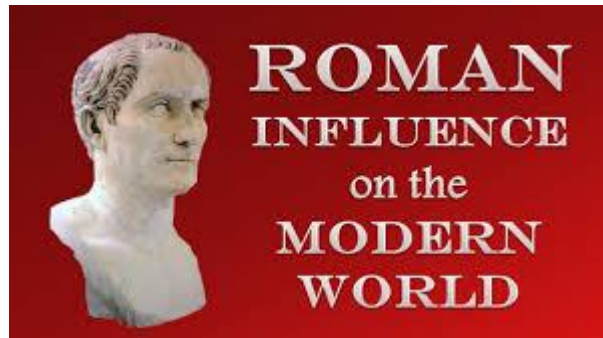
Ancient Egypt (Ebers Papyrus, 1550 BC)

- Ebers Papyrus (1550 BC)
- 20m scroll, 877 remedies for diseases
- Ingredients: Honey, aloe; used fresh for purity
- Example: Pomegranate for worms



Roman Influences

- Galen (129-216 AD): Developed galenicals
- Over 400 remedies with precise compounding
- Introduced percolation, expression; warned of mold
- Theriac: 64-ingredient antidote, standardized proportions



Medieval Developments in the Arab World

- Rhazes (865-925 AD): Kitab al-Mansuri with purity via distillation
- Avicenna (980-1037 AD): Canon with 760 drugs, taste/color impurity tests
- Introduced alcohol distillation, warned of mercury toxicity



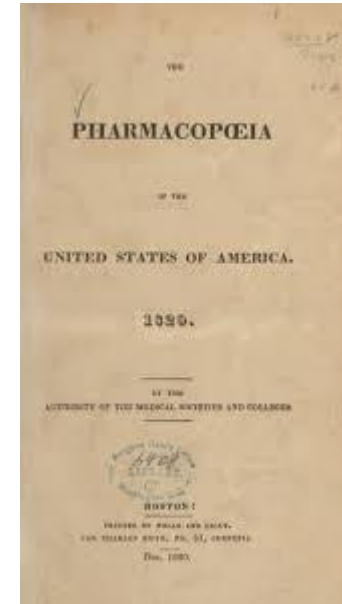
Renaissance and Early Modern Pharmacopoeias in Europe

- Renaissance: Shift to printed pharmacopoeias
- Nuovo Receptario (1498, Florence): 168 standardized recipes
- London Pharmacopoeia (1618): 1,028 simples, 932 compounds
- Regional inconsistencies noted (e.g., Edinburgh 1699, Dublin 1807)



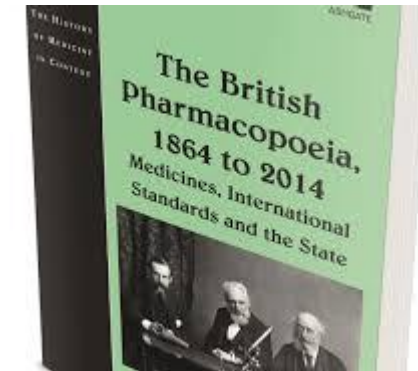
Establishment of the United States Pharmacopeia (1820)

- Founded January 1, 1820, by 11 physicians led by Lyman Spalding
- First edition (Dec 1820): 217 drugs, bilingual (English/Latin)
- Set standards for identity, purity (e.g., ignition tests), strength
- Reduced adulteration risks, e.g., calomel purity with lime water test



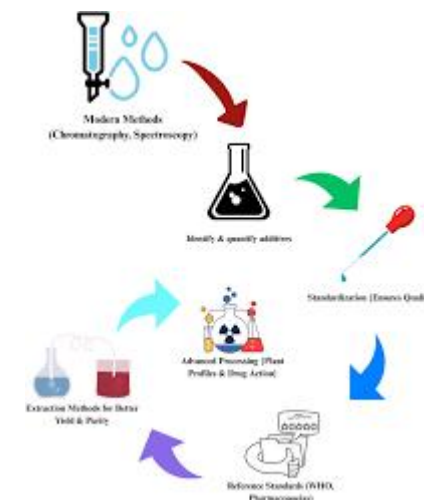
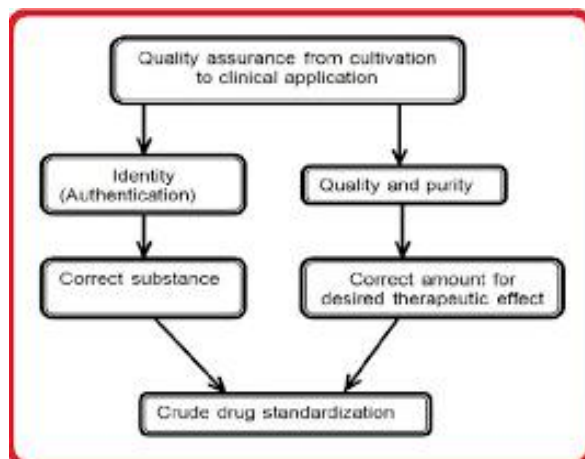
Formation of the British Pharmacopoeia (1864)

- First published in 1864 by General Medical Council
- Unified London, Edinburgh, Dublin standards
- 311 preparations with purity tests for arsenic
- Required $\geq 31.8\%$ hydrochloric acid consistency



Role in Standardizing Drug Purity

- Pivotal role via mandatory tests and impurity limits
- Evolved from sensory tests (e.g., taste for saffron) to chemical assays (USP 1820)
- BP 1864 added quantitative limits (e.g., <0.005%)



History of Pharmacopoeia:

Figure 1. Timeline indicating the year when many of the pharmacopoeias were created.

