

Official compendia includes British Pharmacopoeia, British Pharmaceutical Codex, Indian Pharmacopoeia, United States Pharmacopoeia, National formulary, the State Pharmacopoeia of USSR and Pharmacopoeia of other countries.

2. Nonofficial Compendia

The books other than official drug compendia which are used as secondary reference source for drugs and other related substances are known as nonofficial drug compendia. For instance, Merck index, Remington's pharmaceutical sciences, etc.

INDIAN PHARMACOPOEIA (IP)

The Government of India through its letter No. 2338H(C)/43 dated 26 January, 1944, directed the Drugs Technical Advisory Board to list the drugs in use in India, which are not mentioned in British Pharmacopoeia and also recommend the standards to be prescribed to maintain uniformity and the chemical tests to be used to establish identity and purity. The Government of India published the Indian Pharmacopoeial List in 1946, as a supplement to the British Pharmacopoeia. The term "list" in the title was "misleading" in that, the book not only contained a list of drugs which were of substantial medicinal value but also laid down standards. The Indian Pharmacopoeial list contained about 180 monographs and a number of appendices prepared on the lines of the British Pharmacopoeia.

Approximately 100 monographs were on vegetable drug growing in India and on their galenicals, for example berberis, cannabis, ispaghula, rauwalfia, vasaka, digitalis etc. were included. Similarly several oils such as chaulmoogra, neem, and pudina, were included in it. The Pharmaceuticals and Drug Research Committee of the Council of Scientists and Industrial Research decided in February 1947 to compile a "Brochure" to highlight the information and clinical uses of the important indigenous drugs of India, in the form of a "codex". The first Indian Pharmaceutical codex was published in 1953. The codex consist of two parts, the first part carried about 190 general monographs on natural products and drugs of vegetable and

that have adopted the BP as their national standard alongside the UK, and in other countries (e.g. Korea) it is recognized as an internationally acceptable standard. The BP is prepared by the Pharmacopoeial Secretariat working in collaboration with the BP Laboratory, the British Pharmacopoeia Commission (BPC) and its Expert Advisory Groups (EAG) and Advisory Panels. The development of pharmacopoeial standards receives input from relevant industries, hospitals, academia, professional bodies and governmental sources, both within and outside the UK. The BP Laboratory provides analytical and technical support to the British Pharmacopoeia

The current edition of the British Pharmacopoeia comprises six volumes which contain nearly 3,000 monographs for drug substances, excipients and formulated preparation, together with supporting General Notices, Appendices (test methods, reagents etc) and Reference Spectra used in the practice of medicine, all comprehensively indexed and cross-referenced for easy reference.

BP Volumes I and II contains

- Medicinal Substances

BP Volume III contains

- Formulated Preparations
- Blood related Preparations,
- Immunological Products,
- Radiopharmaceutical Preparations
- Surgical Materials
- Homeopathic Preparations

BP Volume IV contains

- Appendices
- Infrared Reference Spectra
- Index

BP Volume V contains

- British Pharmacopoeia (Veterinary)

BP Volume VI (CD-ROM version) contains

- British Pharmacopoeia

- ❖ The International Pharmacopoeia is issued by the World Health Organization, The aim is to achieve a wide global uniformity of quality specifications for selected pharmaceutical products, excipients, and dosage forms.

PRACTICE QUESTIONS

Very Short Answer Type Questions

1. Define the term Pharmacopoeia?
2. In which year was the first British pharmacopoeia published?
3. Give the year of publication of first USP.
4. In which year did the first pharmacopoeia of India come out?
5. How many monographs are there in Indian Pharmacopoeial list?
6. When was the first International pharmacopoeial list published?
7. Who was the publisher of Indian pharmacopoeia?
8. When was Indian pharmacopoeial list published?
9. In which year the various editions of the pharmacopoeia of India come out?
10. When was the first Indian Pharmaceutical codex published?
11. When was the term "Pharmacopoeia" used for the first time?
12. When was the first international pharmacopoeia published?

Short Answer Type Questions

1. Define the term Pharmacopoeia.
2. Name the various pharmacopoeias commonly used in India
3. Name the various standards reference books on pharmacy in common use in our country.
4. Give the reasons for the publication of International Pharmacopoeia by WHO.

- ii. **Lozenges:** Lozenges are medicated solid preparations that need to be sucked inside the mouth until dissolved. Lozenges are typically used to relieve coughs and sore throats.
- iii. **Buccal tablet:** medications are administered by placing them between the gum and the cheek (buccal). The medications dissolve rapidly and are absorbed through the mucous membranes of the mouth, where they enter into the bloodstream. It avoids the acid and enzymatic environment of the stomach and the drug-metabolizing enzymes of the liver. Examples of drugs administered by this route are vasodilators, steroidal hormones.
- iv. **Sublingual tablet:** This tablet is designed to be placed under the tongue so that it can be absorbed directly into the bloodstream through the mucosal membrane. It is the second fastest route after IV administration, e.g. is trinitrate tablet.
- v. **Chewable tablet:** This tablet is meant to be chewed to make it broken down to smaller pieces. This will increase the surface area exposed for the dissolution process and allows medicines that are released to be absorbed more quickly. This type of tablet is usually given to patients who have difficulty in swallowing, such as the elderly and children. It is also used if the dose given is too large, e.g. multivitamin chewable tablet.
- vi. **Effervescent tablet:** This tablet will dissolve upon contact with water due to the release of gas. Gas produced from the reaction of bicarbonate with citric or tartaric acid facilitates the process of dissolving the medicine, e.g. vitamin C tablet.
- vii. **Enteric coated tablet:** A tablet with a special coating that avoids it from dissolving in the stomach but will dissolve in the intestine. It is used to prevent medicine from being degraded by gastric juice in the stomach so that it can be absorbed in the intestine.

Pills

Pills are small round or egg-shaped bodies for internal use, consist of spherical masses prepared from one or more

to be applied to the skin uniformly without friction. They are lightly applied on the skin or applied on a suitable dressing and covered with waterproof substance like glycerin to reduce evaporation. They may be prepared by triturating the ingredients to a smooth paste and then gradually adding the remaining liquid phase. For large quantity preparation, high speed mixers or homogenizer are used. A wide variety of ingredients are employed in the preparation to produce better dispersions that show good cooling, soothing, drying or protective nature of the lotion. Following substances are used in the preparation of lotions.

1. Bentonite: As a suspending agent.
2. Methylcellulose (MC) or sodium carboxymethyl cellulose (Sodium CMC): To hold the active ingredient in contact with the affected site.
3. Glycerin: Keep the skin moist for considerable period of time and to prevent the loss of moisture.
4. Alcohol: Used for increased the action like drying, cooling etc.
5. Miscellaneous: Benzocaine, calamine, steroids, zinc oxide, etc.

Lotions are generally prescribed for the following purpose— anesthetic, antiseptic, astringent, germicide, protective, anti-histaminic. Micro-organisms may grow in certain lotions if no preservative is added. Care should be taken to avoid contamination during the preparation of lotion, even if it contains preservative.

Eye Drops

Eye drops are saline-containing drops used as a vehicle to administer medication in the eye. Depending on the condition being treated, they may contain steroids, antihistamines or topical anesthetics. Eye drops sometimes do not have medications in them and are only lubricating and tear-replacing solutions.

Ear Drops

Ear drops are solutions, suspensions or emulsions of drugs that are instilled into the ear with a dropper. It is used to treat or