

2. The equivalency exam consists of two parts:

A.Oral exam:

The examining committee will evaluate the pharmacy graduate applicants on the general skills and basic scientific knowledge of pharmacy.

The applicants who passed the oral exam will have the right to participate in the general (theoretical) exam.

B.General (theoretical) exam (100 marks)

Including the following subjects:

- 1- Pharmacology (20 marks)
- 2- Pharmaceutics (20 marks)
- 3- Phytotherapy (20 marks)
- 4- Clinical pharmacy (20 marks)
- 5- Pharmaceutical chemistry (20 marks)

The Exam style will be single choice questions and the minimum passed marks will be 50 out of 100.

3- References for the subjects included in the examination

1. Pharmacology

Pharmacology 4th edition. Lippincott's Illustrated Reviews

Editors: Richard A. Harvey & Pamela C. Champe

- **Introduction to pharmacology**
- **Drugs affecting the nervous system**
- **Drugs affecting cardiovascular system**
- **Drugs affecting endocrine system**
- **Drugs affecting respiratory system**
- **Antimicrobial drugs**

2. Pharmaceutics

Ansel`s pharmaceutical dosage forms and drug delivery systems

- **Section II: Drug Dosage form and drug delivery system design**
- **Section III: Solid dosage forms and solid modified release drug delivery systems**
- **Section IV: Semisolid dosage forms and transdermal systems**
- **Section V: Suppositories, Inserts and sticks**
- **Section VI: Liquid dosage forms**
- **Section VII: Sterile dosage forms and delivery systems**

3. Phytotherapy

Fundamentals of Pharmacognosy and Phytotherapy, Michael Heinrich, Joanne Barnes, Simon Gibbons and Elizabeth M. Williamson (2012).

Part B/ Important natural products and phytomedicines used in pharmacy and medicine:

- **The gastrointestinal and biliary system**
- **The cardiovascular system**
- **The respiratory system**
- **The central nervous system**
- **The musculoskeletal system**
- **Infectious disease**

4. Clinical pharmacy

Editors by: RoGER walker CATE whittlesea (4th edition)

- **GIT; Peptic ulcer disease Constipation and diarrhea**
- **Cardiovascular system; Hypertension, Coronary artery disease, Congestive heart failure and arrhythmias**
- **Respiratory system; Asthma and COPD**
- **Infectious diseases; UTI, Infective meningitis and respiratory infections**
- **Endocrine disorders; Thyroid disorders and diabetes mellitus**

5. Pharmaceutical chemistry

Wilson and Gisvold's textbook of Organic Medicinal and Pharmaceutical Chemistry, 11th Edition

- **Physicochemical properties in relation to Biological Action**
- **Metabolic Changes of Drugs and Related Organic Compounds**
- **Prodrugs**
- **CNS stimulants**
- **CNS depressants**
- **Antibacterial Antibiotics**