

LIST OF RECOMMENDED BOOKS

ENGLISH

Functional English

Grammar:

1. Thomson AJ, Martinet AV. **Practical english grammar**. 3rd Ed. Oxford University Press; 1986.

Writing:

2. Kirszner LG, Mandell SR. **Patterns of College Writing: A Rhetorical Reader and Guide**. 10th Ed. Stephen Martin's Press; 2006.
3. Maley A. **Oxford supplementary skills**: 1st Ed. Writing Intermediate. Cornelsen & Oxford University Press; 1998.

Reading/Comprehension:

4. Langan J. **Reading and Study Skills**. 9th Ed. McGraw Hill Humanities; 2009.

Speaking:

5. Nolasco R. **Speaking: Elementary**: Oxford Supplementary Skills. 4th Ed. Oxford University Press; 1987.

Communication Skills:

Reading/Comprehension:

6. Tomlinson B, Ellis R. **Reading Advanced**. Oxford Supplementary Skills. 3rd Ed. Oxford University Press; 1992.

Technical Writing and Presentation Skills:

Essay Writing and Academic Writing;

7. Langan J. **College Writing Skills with Readings**. 8th Ed. McGraw Hill; 2010.

Presentation Skills;

8. Gilbert MD. **English for Pharmacy writing and oral communication**. 1st Ed. Lippincott Williams & Wilkins; 2008.

Reading;

9. Neulib J, Cain KS, Ruffus S, Scharton M. **The Mercury Reader**: A custom publication. 4th Ed. Pearson; 2011.
10. White R. **Advanced**: Oxford Supplementary Skills. 3rd Ed. Oxford University Press; 1992.
11. Wong L. **Essential Study Skills**. 7th Ed. Wadsworth Publishing; 2011.

PHYSICAL PHARMACY

1. Allen LV, Popovich NG. **Ansel's pharmaceutical dosage forms and drug delivery systems**. 8th Ed. Lippincott Williams & Wilkins New York; 2005.
2. Attwood D, Florence AT. **Surfactant Systems: Their Chemistry, Pharmacy and Biology**. 1st Ed. London: Chapman and Hall Ltd; 1982.
3. Aulton ME. **Aulton's pharmaceuticals: the design and manufacture of medicines**. Churchill Livingstone; 2007.
4. Britain MD. **British national formulary**. 54th Ed. British Medical Association; 2001.
5. Carstensen JT. **Pharmaceutics of solids and solid dosage forms**. 1st Ed. Wiley; 1977.
6. Connors KA, Mecozzi S. **Thermodynamics of pharmaceutical systems: An introduction to Theory and Applications**. 2nd Ed. Wiley & Sons; 2010.
7. Cooper JW, Gunn C, Carter SJ. **Cooper and Gunn's Tutorial Pharmacy**. 6th Ed. New Delhi: CBS Publishers & Distributors; 2004.
8. Davis H. **Bentley's Text Book of Pharmaceutics**. 2nd Ed. Tindall and Cox Publishers; 1961.
9. Finlay WH. **The mechanics of Inhaled pharmaceutical aerosols: An introduction**. 1st Ed. Academic Press; 2001.
10. Florence AT, Attwood D. **Physicochemical Principles of Pharmacy**. 5th Ed. Pharmaceutical Press; 2011.
11. Florence AT, Siepmann J. **Moderen Pharmaceutics: Basic Principles and Systems: (Drugs and the Pharmaceutical Sciences)**. 5th Ed. Taylor & Francis; 2008.
12. Ganderton D, Jones T, McGinity J. **Advances in Pharmaceutical Sciences**. 1st Ed. Academic Press; 1995.
13. Ghosh TK, Jasti BR. **Theory and practice of contemporary pharmaceutics**. 1st Ed. CRC Press; 2005.
14. Kleemann A, Engel J, Kutscher B, Reichert D. **Pharmaceutical substances: Syntheses, Patents, Applications of the most relevant APIs**. 5th Ed. Thieme; 2008.
15. Lewis GA, Mathieu D, Phan RTL. **Pharmaceutical experimental design: (Drugs & the Pharmaceutical Sciences)**. 1st Ed. Informa HealthCare; 1998.
16. Lund W. **The pharmaceutical Codex: Principles and practice of pharmaceutics**. 16th Ed. Co CBS Publishers; 2009.
17. Rienger M, Scott-Blair GW. **Rheology**. 3rd Ed. Academic Press; 1990.
18. Rowe RC, Sheskey PJ, Quinn ME. **Handbook of pharmaceutical excipients**. 6th Ed. Pharmaceutical Press; 2009.
19. Sinko PJ, Martin AN. **Martin's physical pharmacy and pharmaceutical sciences: physical chemical and biopharmaceutical principles in the pharmaceutical sciences**. 5th Ed. Lippincott Williams & Wilkins; 2006.
20. Sinko PJ. **Martin's Physical Pharmacy and Pharmaceutical Sciences**. 6th Ed. Lippincott Williams & Wilkins; 2010.
21. Winfield AJ, Richards RME. **Pharmaceutical practice**. Elsevier Health Sciences; 2004.
22. Zinc G. **Remington: The Science and Practice of Pharmacy**. Philadelphia College of Pharmacy and Science; 2005.

PHARMACEUTICAL CHEMISTRY (ORGANIC)

1. Bansel RK. **Organic Reaction Mechanism**. 3rd Ed. Tata McGraw Hill; 1992.
2. Bhal BS. **Textbook of Organic Chemistry**. 16th Ed. S. Chand & Co; 2007.
3. Block JH, Beale JM. **Wilson and Gisvold's textbook of organic medicinal and pharmaceutical chemistry**. 20th Ed. Lippincott Williams & Wilkins; 2010.
4. Eliel EL, Wilen SH. **Stereochemistry of Carbon Compounds**. 1st Ed. Tata McGraw Hill; 1994.
5. Finar IL. **Organic Chemistry**. 6th Ed. Person Education Asia; 2001.
6. Roberts JD, Caserio MC. **Basic Principles of organic Chemistry**. 3rd Ed. Addison Wesley; 1990.
7. Sykes P. **Guide Book to Mechanism in Organic Chemistry**. 6th Ed. Longman Co; 1991. Vogel AI, Tatchell AR, Furnis BS, Hannaford AJ, Smith PWG. **Vogel's Textbook of Practical Organic Chemistry**. 5th Ed. Pearson Education Limited; 1996.
8. Wade LG. **Organic Chemistry**. 7th Ed. Prentice Hall; 2010.

PHARMACEUTICAL CHEMISTRY (BIOCHEMISTRY)

1. Berg JM, Tymoczko JL, Stryer L. **Biochemistry**. 7th Ed. WH Freeman and Company; 2010.
2. Bishop ML, Fody EP, Schoeff LE. **Clinical Chemistry: Techniques, Principles and Correlations**. 6th Ed. Lippincott Williams & Wilkins; 2009.
3. Champe PC, Harvey RA. **Illustrated Biochemistry**. 4th Ed. Lippincott Company; 2007.
4. Chatterjee MN. **Medical Biochemistry**. 7th Ed. Jaypee Brothers Medical Publishers; 2007.
5. Conn EE, Stumpf PK. **Outlines of Biochemistry**. 5th Ed. John Willey & Sons; 1999.
6. Lehninger AL. **Principles of Biochemistry**. 4th Ed. CBS Publisher; 2004.
7. Murray R, Rodwell V, Bender D, Kathleen M, Botham P, Weil A et al. **Harper's Illustrated Biochemistry**. 28th Ed. Print-Hall; 2009.
8. West ES, Todd RW, Van BTJ. **Text Book of Biochemistry**. The MacMillan Co; 1996.

PHYSIOLOGY

1. Chatterjee CC. **Human Physiology**. 9th Ed. Medical Allied Agency; 1994.
2. Cyril A, Neil E, Joels N. **Samson Wright's Applied Physiology**. 13th Ed. Oxford University Press; 1992.
3. Guyton AC. **Text Books of Medical Physiology**. 9th Ed. W B Saunders Company; 2011.
4. Kuntzman AJ, Tortora GJ. **Anatomy and physiology for the manual therapies**. 1st Ed. John Wiley & Sons; 2009.
5. Martini F. **Fundamentals of anatomy and physiology**. 8th Ed. Prentice Hall; 2010.
6. Saladin KS, Miller L. **Anatomy & physiology: The Unity of Form and Function**. 6th Ed. McGraw-Hill; 1998.
7. Snell RS. **Clinical Anatomy for Medical Students**. 1st Ed. Litle Brown & CoInc; 1992.
8. Spence AP, Elliot B, Mason EB. **Human Anatomy and Physiology**. 3rd Ed. West Publishing Company; 1992.
9. Stuart Ira. **Human Physiology**. 11th Ed. Fox; 2008.
10. Tortora GJ, Derrickson B. **Principles of anatomy and physiology**. 13th Ed. Wiley; 2010.
11. Widmaier E, Raff H, Strang K. **Vander's Human Physiology**. 12th Ed. McGraw Hill; 2010.
12. William F, Ganong WF. **Review of Medical physiology**. 22nd Ed. Prentice Hall International Inc; 2005.

ANATOMY & HISTOLOGY

Anatomy

1. Drake RL, Vogl WA, Mitchell AWM. **Gray's Anatomy: Descriptive and Applied**. 2nd Ed. Churchill Living Stone; 2009.
2. Grant B. **A Method of Anatomy**. 9th Ed. Bailliere Tinal and Co Ltd; 1975.
3. Hamilton WJ. **A Textbook of Anatomy**. 2nd Ed. Macmillan and Co; 1976.
4. Kuntzman AJ, Tortora GJ. **Anatomy and physiology for the manual therapies**. 1st Ed. John Wiley & Sons; 2009.
5. Last RJ. **Anatomy: Regional and Applied**. 11th Ed. J and A Churchill Ltd; 2001.
6. Martini F, Ober WC, Garrison CW, Welch K, Hutchings RT. **Fundamentals of Anatomy and Physiology**. 5th Ed. Prentice Hall; 2001.
7. Moore KL, Dalley AF, Agur AMR. **Clinically Oriented Anatomy**. 6th Ed. Lipponcott Williams and Wilkin; 2009.
8. Romanes GJ. **Cunningham's Manual of Practical Anatomy**. 15th Ed. Oxford University Press; 1986.
9. Saladin KS, Miller L. **Anatomy & physiology: The Unity of Form and Function**. 6th Ed. McGraw Hill; 1998.
10. Snell RS. **Clinical Anatomy**. 7th Ed. Boston Little Brown and Company; 2003.
11. Standring S. **Gray's anatomy: The Anatomical Basis of Clinical Practice**. 40th Ed. Churchill Livingstone; 2008.
12. **Tissues of the body by Legros Clerks**. Publisher Oxford at the Clarendon Press, London.
13. Tortora GJ, Derrickson B. **Principles of anatomy and physiology**. 13th Ed. Wiley; 2010.

Histology

1. Cormack HD. **Essentials of Histology**. 2nd Ed. JB Lippincott Co; 1993.
2. Hammersen F. **Histology: Color atlas of microscopic anatomy**. 3rd Ed. Lee & Febijer Co; 1985.
3. Hewer EE, Bradbury S. **Textbook of Histology for Medical Students**. 9th Ed. William Heinemann Medical Books Ltd; 1973.

ISLAMIC STUDIES

1. Bhatia HS. **Studies in Islamic Law: Religion and Society**. Deep & Deep Publications New Delhi; 1989.
2. Hasan A. **Principles of Islamic Jurisprudence**. Islamic Research Institute, International Islamic University, Islamabad; 1993.
3. Hassan HH. **An Introduction to the Study of Islamic Law**. Leaf Publication Islamabad, Pakistan.
4. Muhammad HU. **Emergence of Islam**. IRI, Islamabad.
5. Muhammad HU. **Introduction to Islam**. Maulana Muhammad Yousaf Islahi.
6. Muhammad HU. **Muslim Conduct of State**.
7. Waliullah M. **Muslim Jrisprudence and the Quranic Law of Crimes**. Islamic Book Service; 1982.
8. Zia-ul-Haq M. **Introduction to Al-Sharia Al-Islamia**. Allama Iqbal Open University, Islamabad; 2001.

PHARMACEUTICS (DOSAGE FORMS SCIENCE)

1. Allen LV, Popovich NG, Ansel HC. **Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems**. 9th Ed. Lippincott Williams & Wilkins; 2010.
2. Armstrong NA, James KC. **Understanding Experimental Design and Interpretation in Pharmaceutics**. 1st Ed. Taylor & Francis Ltd; 1990.
3. Aulton ME. **Aulton's Pharmaceutics: The Design and Manufacture of Medicines**. 3rd Ed. Churchill Livingstone; 2007.
4. Bentley AO. **Text book of Pharmaceutics**. 8th Ed. Macmillan Publishing Co Inc; 1977.
5. Carstensen JT. **Pharmaceutics of Solids and Solid Dosage Forms**. 1st Ed. John Wiley & Sons Inc; 1977.
6. Davis H. **Bentley's Text book of Pharmaceutics**. 2nd Ed. Tindall and Cox Publishers; 1961.
7. Dittert LW. **Sprowl's American Pharmacy**. 7th Ed. JB Lippincott Co; 1990.
8. Finlay WH. **The Mechanics of Inhaled Pharmaceutical Aerosols: An Introduction**. 1st Ed. Academic Press; 2001.
9. Florence AT, Siepmann J. **Moderen Pharmaceutics: Basic Principles and Systems**. 5th Ed. Taylor & Francis; 2009.
10. Ghosh T, Jasti B. **Theory and Practice of Contemporary Pharmaceutics**. 1st Ed. CRC Press; 2005.
11. Kleemann A, Engel J, Kutscher B, Reichert D. **Pharmaceutical Substances: Synthesis, Patents, Applications of the most relevant APIs**. 5th Ed. Thieme; 2008.
12. Lewis GA, Mathieu D, Phan RTL. **Pharmaceutical Experimental Design**. 1st Ed. Informa HealthCare; 1998.
13. Lund W. **The Pharmaceutical Codex: Principles and Practice of Pharmaceutics**. 12th Ed. The Pharmaceutical Press; 1994.
14. Mehta D. **British National Formulary (BNF)**. 54th Ed. Pharmaceutical Press; 2007.
15. Rowe RC. **Handbook of Pharmaceutical Excipients**. 6th Ed. Pharmaceutical Press; 2009.
16. Sinko PJ, Martin AN. **Martin's physical pharmacy and pharmaceutical sciences: physical chemical and biopharmaceutical principles in the pharmaceutical sciences**. 5th Ed. Lippincott Williams & Wilkins; 2006.
17. Winfield AJ, Richards RME. **Pharmaceutical practice**. 3rd Ed. Elsevier Health Sciences; 2004.
18. Zinc G. **Remington: The Science and Practice of Pharmacy**. 21st Ed. Philadelphia College of Pharmacy and Science; 2005.

PHARMACEUTICS (PHARM. MICROBIOLOGY & IMMUNOLOGY)

1. Brooks G, Carroll KC, Butel J, Morse S, Mietzner T. **Jawetz, Melnick & Adelberg's Medical Microbiology and Immunology**. 24th Ed. Churchill Livingstone; 2010.
2. Collins CH, Lynes PM, Grange JM, Falkinham JO. **Collins & Lyne's Microbiological Methods**. 8th Ed. Vutterworth Heineman; 2004.
3. Fraise A, Lambert PA, Maillard JY. **Russell, Hugo & Ayliffe's Principles and Practice of Disinfection, Preservation & Sterilization**. 4th Ed. Wiley Blackwell; 2004.
4. Harvey RA, Champe PC, Fisher BD. **Microbiology: Lippincott's Illustrated Reviews Series**. 4th Ed. William & Willkins; 2004.
5. Hugo WB, Russell AD. **Pharmaceutical Microbiology**. 7th Ed. Black Well Science Ltd; 1998.

6. Hugo WB, Denyer SP, Hodges NA, Gorman SP. **Hugo and Russell's pharmaceutical microbiology**. 7th Ed. Wiley Blackwell; 2004.
7. McKane L, Kandel J. **Microbiology: Essentials and Application**. 2nd Ed. McGraw Hill Inc; 1995.
8. Pelczar MJ. **Microbiology**. 7th Ed. McGraw Hill Inc; 2007.
9. Pommerville JC. **Alcama's Funtamentals of Microbiology**. 9th Ed. John Bartlett Publishers; 2010.
10. Singleton P, Sainsbury D. **Dictionary of Microbiology and Molecular Biology**. 3rd Ed. John Willey & Sons; 2006.
11. Willey J, Sherwood L, Woolverton C. **Prescott's Microbiology**. 8th Ed. C Brown Publishers; 2010.

PHARMACOLOGY & THERAPEUTICS

1. Brunton L, Lazo J, Parker K. **Goodman & Gilman's Pharmacological Basis of Therapeutics**. 11th Ed. McGraw Hill Book Company; 2005.
2. Chang HM, But PPH, Yao SC, Wang LL, Yeung SCS. **Pharmacology and applications of Chinese Materia Medica**. 3rd Ed. World Scientific Pub Co Inc; 2000.
3. Ebadi M. **Pharmacology**. 3rd Ed. Little Brown & Company; 1996.
4. Harvey RA, Champe PC. **Lippincott's Illustrated Reviews: Pharmacology**. 4th Ed. Lippincott William & Wilkins; 2008.
5. Humphrey P. **Rang & Dale's Pharmacology**. 6th Ed. Churchil Livingstone; 2007.
6. Katzung BG, Masters SB, Trevor AJ. **Basic & Clinical Pharmacology**. 11th Ed. McGraw Hill; 2009.
7. Koda KMA, Young LY, Kradjan WA, Guglielmo BJ, Alldredge BK, Corelli RL. **Applied therapeutics: the clinical use of drugs**. 9th Ed. Lippincott Williams & Wilkins; 2008.
8. Laurence DR. **Clinical Pharmacology**. 8th Ed. ELBS Publishers; 1998.
9. Ritter JM, Levis LD. **A Text Book of Clinical Pharmacology**. 5th Ed. Oxford University Press; 2008.
10. Satorkar RS, Bhandarkar SD. **Pharmacology and Pharmacotherapeutics**. 19th Ed. Bomby: Popular Prakashan; 1998.
11. Tripathi JD. **Essentials of Medical Pharmacology**. 6th Ed. Jaypee Brothers; 2008.
12. Wecker L, Crespo L, Dunaway G, Faingold C, Watts S. **Brody's Human Pharmacology**. 5th Ed. Mosby Inc; 2009.

PHARMACOGNOSY

1. Anonymous. **Monographs of Unani Medicine**. Hamdard Foundation Pakistan; 2003.
2. Baker BM, Bender DA. **Vitamins in Medicine**. 12th Ed. Academic Press; 1982.
3. Brain KR, Turner TD. **The Practical Evaluation of Phytopharmaceuticals**. 1st Ed. Scientehnica Publishers; 1975.
4. Braun L, Cohen M. **Herbs and Natural Supplements: An Evidence Based Guide**. 3rd Ed. London: Elsevier Mosby; 2010.
5. Chauhan P. **Ayurvedic Pharmacognosy**. 1st Ed. Sonali Publications; 2007.
6. Cutler SJ, Cutler HG. **Biologically Active Natural Products: Pharmaceuticals**. 1st Ed. CRC Press Publisher; 1999.

7. Dewick PM. **Medicinal Natural Products: A Biosynthetic Approach**. 1st Ed. John Wiley & Sons; 1997.
8. Evans WC, Trease GE, Evans D. **Trease and Evan's Pharmacognosy**. 16th Ed. Elsevier Health Sciences Publisher; 2009.
9. Forhne D, Pfander HJ. **Poisonous Plants: A Hand Book for Doctors, Pharmacists, Toxicologists, Biologists and Veterinarians**. 2nd Ed. Timber Press; 2005.
10. Harborne JB, Baxter H. **The Hand Book of Natural Flavonoids**. 2nd Ed. John Willey & Son; 1999.
11. Jackson BP. **Atlas of Microscopy of Medicinal Plants, Culinary Herbs and Spices**. 2nd Ed. CBS Publishers; 2005.
12. Khandelwal K. **Practical Pharmacognosy**. 8th Ed. Nirali Prakashan Publishers; 2008.
13. Lesley Braun and Marc Cohen. **Herbs and Natural Supplements: An evidence Based guide**. 3rd Ed. London: Elsevier Mosby; 2010.
14. Lockwood B. **Nutraceuticals: A Guide for Healthcare Professionals**. 2nd Ed. Pharmaceutical Press; 2007.
15. Mannito P. **Biosynthesis of Natural Products**. John Wiley & Sons; 1981.
16. Manske RHF. **Alkaloids: Chemistry and Physiology**. Academic Press; 1970.
17. Partab Chauhan. **Ayurvedic Pharmacognosy**. 1st Ed. Sonali Publications; 2007.
18. Ross IA. **Medicinal Plants of the World**. 2nd Ed. Humana Press; 2003.
19. Smith AB. **Poisonous Plants of All Countries**. 2nd Ed. Periodical Expert Book; 1988.
20. Smith AB. **Poisonous Plants of all Countries: With the Active, Chemical Principles Which They Contain; and the Toxic Symptoms Produced by Each Group**. 4th Ed. General Books LLC; 2010.
21. Tyler VE, Brady LR, Robbers JE. **Pharmacognosy**. 10th Ed. Lea and Febiger; 2001.
22. Wichtl M. **Herbal Drugs and Phytopharmaceuticals**. 3rd Ed. Medpharm Publishers; 2004.

PHARMACY PRACTICE (PHARMACEUTICAL MATHEMATICS)

1. Bali N, Gupta P, Gandhi C. **A Textbook of Pharmaceutical Mathematics**. 2nd Ed. Laxmi Publications; 2008.
2. Edwards CH, Penney DE. **Calculus and Analytic Geometry**. 5th Ed. Prentice Hall Inc; 1999.
3. Hoel PG, Port SC, Stone CJ. **Introduction to Statistical Theory**. 1st Ed. Brooks Cole; 1972.

PAKISTAN STUDIES

1. Ansar Z. **History & Culture of Sindh**. Royal Book Company; 1980.
2. Aziz KK. **Party Politics in Pakistan**. Sang-e-Meel Publications; 2007.
3. Bin SK. **The Political System of Pakistan**. Houghton Mifflin; 1967.
4. Burke SM, Ziring L. **Pakistan's Foreign Policy: A Historical Analysis**. Oxford University Press; 1993.
5. Haq NU. **Making of Pakistan: The Military Perspective**. National Commission on Historical and Cultural Research; 1993.
6. Javed BS. **State & Society in Pakistan**. The Macmillan Press Ltd; 1980.
7. Lawrence Z. **Pakistan: Enigma of Political Development**. Dawson Publishing; 1980.
8. Rafique AM. **Political Parties in Pakistan**. 2nd Ed. National Institute of Historical and Cultural Research; 1986.

9. Safdar M. **Pakistan Kayyun Toota**. Idara-e-Saqafat-e-Islamia;
10. Safdar M. **Pakistan Political Roots & Development**. 1st Ed. Oxford University Press; 2003.
11. Tahir A. **Ethno National Movement in Pakistan: Domestic and International Factors**. 1st Ed. Institute of Policy Studies; 1988.
12. Waseem M. **Pakistan under Martial Law**. 1st Ed. Vanguard Books Ltd; 1987.
13. Wayne W. **The Emergence of Banglades**. American Enterprise; 1972.
14. Zaidi AS. **Issue in Pakistan's Economy**. 2nd Ed. Oxford University Press; 2006.

PHARMACY PRACTICE (BIO-STATISTICS)

1. Daniel WW. **Bio-Statistics: Foundation for Analysis in Health Science**. 9th Ed. Wiley Publishers; 2009.
2. Nilton JS. **Statistical Methods in Biological and health Sciences**. 3rd Ed. McGrew Hill; 1998.
3. Hoel PG, Port SC, Stone CJ. **Introduction to Statistical Theory**. 1st Ed. Brooks Cole; 1972.
4. Samuels M. **Statistics for the life sciences**. 3rd Ed. Dellen Publishers co; 2002.
5. Zar JH. **Biostatistical analysis**. 4th Ed. Francis Hall; 1999.

PHARMACY PRACTICE (DISPENSING PHARMACY)

1. Armstrong NA, James KC. **Understanding experimental design and interpretation in pharmaceuticals**. 1st Ed. Taylor & Francis Publishers; 1990.
2. Gennaro AR. **Remington: The science and practice of pharmacy**. 21st Ed. Lippincott Williams & Wilkins; 2011.
3. Marriott JF, Wilson KA, Langley CA, Belcher D. **Pharmaceutical compounding and dispensing**. 2nd Ed. Pharmaceutical Press; 2010.
4. Cooper JW, Gunn C, Carter SJ. **Cooper and Gun's Dispensing for Pharmaceutical Students**. 12th Ed. CBS Publishers & Distributors; 2008.
5. Lund W. **The Pharmaceutical Codex: Principles and practice of pharmaceuticals**. 16th Ed. Co CBS Publishers; 2009.
6. Mehta DK. **British national formulary (BNF)**. 54th Ed. Pharmaceutical Press; 2007.
7. Rowe RC. **Handbook of pharmaceutical excipients**. 6th Ed. Pharmaceutical press; 2009.
8. Winfield AJ, Rees J, Smith I. **Pharmaceutical Practice**. 4th Ed. Churchill Livingstone; 2009.

PHARMACEUTICAL CHEMISTRY (PHARMACEUTICAL ANALYSIS)

1. Ahuja S, Scypinski S. **Handbook of modern pharmaceutical analysis**. 2nd Ed. Academic Press; 2010.
2. Armstrong NA, James KC. **Understanding experimental design and interpretation in pharmaceuticals**. 1st Ed. Taylor & Francis Publishers; 1990.
3. Beckett AH, Stennlake JB. **Practical Pharmaceutical Chemistry**. 4th Ed. The Aulton Press; 2001.
4. Braithwaite A, Smith FJ. **Chromatographic Methods**. 5th Ed. Chapman and Hall; 1995.
5. Brittain HG. **Spectroscopy of pharmaceutical solids**. 1st Ed. Taylor & Francis; 2006.
6. Hamilton R, Sewell PA. **Introduction to HPLC**. 1st Ed. Chapman & Hall; 1982.
7. Heftmann E. **Chromatography**. 6th Ed. Von Nostrand Reinhold Co; 2004.

8. Kazakevich Y, LoBrutto R. **HPLC for pharmaceutical scientists**. 1st Ed. John Wiley and Sons; 2007.
9. Kemp W. **Organic Spectroscopy**. 3rd Ed. Ellsi Horwood; 2008.
10. Knevel AM, Digangi FE. **Jenkin's quantitative Pharmaceutical Chemistry**. 7th Ed. McGraw Hill; 1977.
11. Lough WJ, Wainer WI. **High Performance Liquid Chromatography**. 1st Ed. Blacki Academic Press; 1995.
12. Moffat AC, Osselton DM, Widdop B. **Clarke's Analysis of Drugs and Poisons**. 4th Ed. Pharmaceutical Press; 2011.
13. Pryde A, Gilbert MJ. **Applications of High Performance Liquid Chromatography**. 1st Ed. Chapman & Hall; 1979.
14. Snyder LR, Kirkland JJ, Dolan JW. **Introduction to modern liquid chromatography**. 3rd Ed. John Wiley & Sons Inc; 2009.
15. Stahl E. **Thin Layer Chromatography**. 2nd Ed. Berlin: Springer Verlag; 1969.
16. Williams DH, Fleming I. **Spectroscopic methods in organic chemistry**. 6th Ed. McGraw Hill; 2007.

PATHOLOGY

1. Dipiro J, Talbert RL, Yee G, Matzke G, Wells B, Michael PL. **Pharmacotherapy: A Pathophysiologic Approach**. 8th Ed. McGraw Hill; 2011.
2. Greene RJ, Harris ND. **Pathology and therapeutics for pharmacists**. 3rd Ed. Pharmaceutical press; 2008.
3. Kumar V, Cotran RS, Robbins SL. **Robbin's Basic Pathology**. 8th Ed. W. B. Saunders Publishers; 2007.
4. Macfarlane PS, Reid R, Collander R. **Pathology Illustrated**. 5th Ed. Churchill Livingstone; 2000.
5. Walter GB. **Walters and Israel General Pathology**. 7th Ed. Churchill Livingstone; 1996.

PHARMACY PRACTICE (COMMUNITY, SOCIAL & ADMINISTRATIVE PHARMACY)

1. Allen LV, Popovich NG, Ansel HC. **Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems**. 9th Ed. Lippincott Williams & Wilkins; 2010.
2. Armstrong NA, James KC. **Understanding Experimental Design and Interpretation in Pharmaceutics**. 1st Ed. Taylor & Francis publishers; 1990.
3. Cooper JW, Gunn C, Carter SJ. **Cooper and Gun's Dispensing for Pharmaceutical Students**. 12th Ed. CBS Publishers & Distributors; 2008.
4. Desselle SP, Zgarrick DP. **Pharmacy Management: Essentials for all Practice Settings**. 2nd Ed. McGraw Hill; 2008.
5. Gennaro AR. **Remington: The science and Practice of Pharmacy**. 21st Ed. Lippincott Williams & Wilkins; 2011.
6. Lund W. **The pharmaceutical Codex: Principles and Practice of Pharmaceutics**. 16th Ed. Co. CBS Publishers; 2009.
7. Marriott JF, Wilson KA, Langley CA, Belcher D. **Pharmaceutical Compounding and Dispensing**. 2nd Ed. Pharmaceutical Press; 2010.

8. Martindale W, Westcoot W. **Martindale: The Complete Drug Reference.** 1st Ed. Pharmaceutical Press; 2008.
9. Mehta DK. **British National Formulary (BNF).** 54th Ed. Pharmaceutical Press; 2007.
10. O'Donohue WT, Levensky ER. **Promoting Treatment Adherence: A practical handbook for health care providers.** 1st Ed. Sage Publications; 2006.
11. Osol A. **Remington's Pharmaceutical Sciences.** 17th Ed. Mack Publishing Company; 2001.
12. Spivey RN, Wertheimer AI, Donald RT. **International pharmaceutical services: The Drug Industry and Pharmacy Practice in Twenty Three Major Countries of the World.** 1st Ed. Informa Healthcare; 1996.
13. Robertson R. **Management of Drug Users in the Community: A practical Handbook.** 1st Ed. Hodder Arnold Publishers; 1998.
14. Rowe RC. **Handbook of Pharmaceutical Excipients.** 6th Ed. Pharmaceutical Press; 2009.
15. Saha GB. **Fundamentals of Nuclear Pharmacy.** 6th Ed. Springer Verlag; 2010.
16. Desselle SP, Zgarrick DP. **Pharmacy management: Essentials for all practice settings.** 2nd Ed. McGraw Hill; 2008.
17. Spivey RN, Wertheimer AI, Donald RT. **International Pharmaceutical Services: The Drug Industry and Pharmacy Practice in Twenty Three Major Countries of the World.** 1st Ed. Informa Healthcare; 1996.
18. Martindale W, Westcoot W. **Martindale: The Extra Pharmacopeia.** 31st Ed. Pharmaceutical Press; 2008.
19. O'Donohue WT , Levensky ER. **Promoting treatment adherence: A practical handbook for health care providers.** 1st Ed. Sage Publications; 2006.
20. Winfield AJ, Rees J, Smith I. **Pharmaceutical Practice.** 4th Ed. Churchill Livingstone; 2009.

PHARMACY PRACTICE **(COMPUTER AND ITS APPLICATIONS IN PHARMACY)**

1. Dennis N. **Programmer's Guide to MS-DOS.** 2nd Ed. BradyGames; 1987.
2. Elias M. **System Analysis and design.** 2nd Ed. Award Galgotia Publications; 1985.
3. Norton P, Clark S. **Peter Norton's Complete Guide to DOS 6.22.** 1st Ed. Sams Publishers; 1994.
4. Norton P, Clark S. **Peter Norton's New Inside the PC.** 1st Ed. Sams Publishers; 2002.

PHARMACY PRACTICE (HOSPITAL PHARMACY)

1. Bukhari NI. **Hospital Pharmacy.** 1st Ed. Aziz Book Depot; 2000.
2. Hassan W. **Hospital Pharmacy.** 5th Ed. Lee & Febiger; 1986.
3. Stephen M. **Hospital Pharmacy.** 2nd Ed. Pharmaceutical Press; 2001.

PHARMACY PRACTICE (CLINICAL PHARMACY)

1. DiPiro JT. **Encyclopedia of Clinical Pharmacy.** 1st Ed. Informa Healthcare; 2002.
2. DiPiro JT. **Pharmacotherapy, A Pathophysiologic Approach.** McGraw Hill Companies, South Carolina; 2008.

3. Gennaro AR. **Remington: The science and practice of pharmacy**. 21st Ed. Lippincott Williams & Wilkins; 2011.
4. Gourley H. **Clinical Pharmacy & Therapeutics**. 4th Ed. William & Wilkins; 1992.
5. Greene RJ, Harris ND. **Pathology and therapeutics for pharmacists**. Pharmaceutical Press; 2008.
6. Hansen K, Parthasarathi G. **Text Book of Clinical Pharmacy**. 2nd Ed. Orient Blackswan; 2008.
7. Hansten P, Horn J. **Drug interactions Analysis and Management**. 5th Ed. Lippincott Williams & Wilkins; 2010.
8. Koda-Kimble MA, Young LY, Kradjan WA, Guglielmo BJ, Alldredge BK, Corelli RL. **Applied therapeutics: the clinical use of drugs**. Lippincott Williams & Wilkins Baltimore; 2005.
9. Paul G. **A Behavioral Approach to Pharmacy Practice**. 1st Ed. Black Well; 2000.
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RECOMMENDATIONS:

1. The up-dated curriculum of Doctor of Pharmacy program after the approval from Pharmacy Council of Pakistan (PCP) and Higher Education Commission (HEC) shall be binding on every Pharmacy Institution/ University (Public and Private) to adopt revised curricula.
2. The revised curricula shall be adopted from the 2012 session.
3. Violation in adoption of the approved curriculum shall be liable to penalty under section 17 & 19 of Pharmacy Act, 1967 and rules framed there-under, which may lead to revoking of affiliation/ accreditation by the PCP.
4. No omission and changes are allowed in the said curriculum approved by PCP and HEC, by any institution.
5. Doctor of Pharmacy degree holders will be allowed for direct admission in M.S. /M. Phil leading to PhD program.