

**PHARMACY PRACTICE-VII (FORENSIC PHARMACY) (Theory)**

**Paper 4**

**Marks 100**

1. **GENERAL INTRODUCTION:** Forensic Pharmacy & Forensic Pharmacist, History of Drug Legislation and Pharmacy Profession in Pakistan, National Health Policy, National Drug Policy, Essential Drugs, Prescription handling at Retail level and Record keeping, Drug Control Administration at Federal and Provincial level.
2. **ROLE OF FORENSIC PHARMACIST:** Forensic drug Measurement, Post-mortem redistribution (PMR), Medication errors, prescription forgery, product tampering, Insurance fraud, Use of drugs or alcohol in car accidents or violent actions, Legal and illegal pharmaceutical evidence in criminal investigations, use of abused drugs in the workplace, professional malpractice, quackery and health care fraud.
3. **PHARMACEUTICAL ETHICS:** Patents and Generics, Ethics in Sale, Ethics in Industry, Ethics in Research.
4. **STUDY OF DRUG LAWS:**
  - a. The Drugs Act 1976 and rules framed there under.
  - b. Provincial Drug Rules (Respective Drug Rules will be taught in the relevant province).
  - c. Advertisement rules.
  - d. Other Related rules and Legal aspects.
5. **THE PHARMACY ACT 1967:**
6. **CONTROL OF NARCOTICS SUBSTANCES ACT 1997:** Laws relating to Narcotic drugs and psychotropic substances.
7. **THE POISONS ACT 1919:**
8. **THE FACTORIES ACT 934:**
9. **SHOPS AND ESTABLISHMENTS ORDINANCE 1969 WITH RULES:**

**PHARMACY PRACTICE-VIII (PHARMACEUTICAL MANAGEMENT & MARKETING) (Theory)**

**Paper 5**

**Marks 100**

1. **MANAGEMENT & MARKETING:**
  - a. Nature and Principles of Management:
  - b. Types and Functions of Managers:
  - c. Planning: Purpose and types of Planning, Steps in Planning
  - d. Organizing:
  - e. Management Control Systems: Purpose, Steps in the Control Process, Forms of operations control. Requirements for adequate control, Critical control points and standards.

- f. Motivation:
  - g. Innovation and Creativity:
  - h. Principals of Marketing:
  - i. Product Management:
  - j. Marketing Research:
2. **PRODUCTION MANAGEMENT:** Material Management, Planning of production, Batch record maintenance.
  3. **MARKETING MANAGEMENT:**
    - a. Ethical consideration of Pharmaceutical Marketing
    - b. Difference between Pharmaceutical Marketing and Consumer Marketing
    - c. Major stakeholders within pharmaceutical market environment.
    - d. Marketing Research (Process and Methodology)
    - e. Market Analysis Techniques 3Cs (Customer analysis, Company analysis, competitors analysis)
    - f. Evaluating the marketing performance (audit tools and audit process)
    - g. Designing sales force structure, sales force size and sales quota
    - h. Marketing channels, Promotion and Advertising and Salesmanship.
  4. **SALES MANAGEMENT:** Personnel, Buying, Receiving, Pricing, Sales promotion and Customer Services.
  5. **BUSINESS DEVELOPMENT MANAGEMENT:** General principles, strategies, short and long term planning and objectives.
  6. **BUSINESS COMMUNICATION:** Importance and benefits of business communication, components of communication, concept and problems of communication, 7C's of communications.
  7. **STRATEGIES FOR SUCCESSFUL BUSINESS AND GLOBAL MEETINGS:** Background information on groups, purpose and kinds of meetings, solving problems in meetings, leadership responsibilities in meetings, participant's responsibilities in meetings.

**NOTE:** Upon completion of recognized Pharm.D. degree, a pharmacy graduate is required to undergo residency based training for a period of 1 year in any area; at public or private Hospital, Pharmaceutical Industry, Community Pharmacy, Pharmaceutical Marketing, Research & Development and Public health recognized by the Pharmacy Council of Pakistan. The objective of the residency is to undergo a planned training on aspects of pharmacy practice under the supervision of a registered pharmacist.