Paper II: - Technical Subject

1. Introduction
   1.1 Development of pharmacy profession and institutions in Nepal
   1.2 Implementation of essential drug concept and standard treatment schedules in the context of open market policy
   1.3 Present status of Pharmacy Human Resources

2. Pharmaceutical processing and processes
   2.1 Modern drug delivery systems
   2.2 Stability of pharmaceutical formulation with special reference to additives
   2.3 Pharmaceutical biotechnology

3. Total quality management (TQM) and quality assurance (QA)
   3.1 Philosophy of TQM with special reference to pharmaceutical industries
   3.2 Quality assurance in pharmaceutical industries

4. Good Manufacturing Practice as recommended by World Health Organization (WHO-GMP)
   4.1 Philosophy and essential elements
   4.2 Good practices in production and quality control
   4.3 Production of sterile, biological and herbal drugs
   4.4 Production of active pharmaceutical ingredients
   4.5 Role of Inspector in GMP inspection
   4.6 Comparison of WHO-GMP with Codes on Manufacturing of Drugs

5. Role of pharmacists in healthcare system
   5.1 Pharmaceutical care and clinical pharmacy
   5.2 Community pharmacy
   5.3 Drug information

6. Drug Supply management and rational use of drugs
   6.1 Selection, quantification, procurement, storage and distribution
   6.2 Drug financing scheme/community drug programme
   6.3 Health insurance
   6.4 National and hospital formularies, drug and therapeutic committee
   6.5 Status of antibiotic use and Antimicrobial Resistance
   6.6 Role of dispensers in rational use of drugs
7. **Quality control of drugs**
   7.1 Specifications
   7.2 Pharmacopoeia
   7.3 Quality parameters of pharmaceutical products and raw materials
   7.4 Laboratory quality management systems
   7.5 Accreditation and proficiency testing
   7.6 Reference standards
   7.7 Quality control of biological products

8. **Drug regulation**
   8.1 Assuring availability of drugs
   8.2 Implementation of drug policy in relation to Drug Act
   8.3 Regulatory measures to overcome evolving drug use problems including narcotic/psychotropic drugs.
   8.4 Price control mechanisms
   8.5 Strategies for regulating traditional and herbal drugs.
   8.6 Pharmacoepeidemiology & Pharmacovigilance.
   8.7 Clinical trial and role of Nepal Health Research Council (NHRC)