PHARMACEUTICAL REGULATORY AFFAIRS (MRA)

GOOD REGULATORY PRACTICES (MRA 101T)

Scope

This course is designed to impart fundamental knowledge on various Good Regulatory Practices viz., cGMP, GLP, GALP and GDP for Pharmaceuticals, Cosmetics, Food & Nutraceuticals, Medical devices, *In-vitro* Diagnostic Medical Devices (IVDs) and biological products and understand the rationale behind these requirements and will propose ways and means of complying with them.

Objectives

At completion of this course it is expected that students will be able to understand.

- The key regulatory and compliance elements with respect to Good Manufacturing Practices, Good Laboratory Practices, Good Automated Laboratory Practices and Good Documentation Practices.
- Prepare and implement the check lists and SOPs for various Good Regulatory Practices
- Implement Good Regulatory Practices in the Healthcare and related Industries
- Prepare for the readiness and conduct of audits and inspections.

THEORY 60 Hrs

- Current Good Manufacturing Practices: Introduction, US cGMP 12
 Part 210 and Part 211.EC Principles of GMP (Directive Hrs 91/356/EEC) Article 6 to Article 14 and WHO cGMP guidelines
 GAMP-5; Medical device and IVDs Global Harmonization Task
 Force(GHTF) Guidance docs.
- 2 Good Laboratory Practices: Introduction, USFDA GLP 12 Regulations (Subpart A to Subpart K), Controlling the GLP Hrs inspection process, Documentation, Audit, goals of Laboratory Quality Audit, Audit tools, Future of GLP regulations, relevant ISO and Quality Council of India(QCI) Standards
- Good Automated Laboratory Practices: Introduction to GALP, 12 Principles of GALP, GALP Requirements, SOPs of GALP, Hrs Training Documentation,21 CFR Part 11, General check list of 21CFR Part 11, Software Evaluation checklist, relevant ISO and OCL Standards.

- 4 Good Distribution Practices: Introduction to GDP, Legal GDP 12 requirements put worldwide. Principles. Personnel. Hrs Documentation. Premises and Equipment, Deliveries Customers, Returns, Self-Inspection, Provision of information, Stability testing principles, WHO GDP, USP GDP (Supply chain integrity), relevant CDSCO guidance and ISO standards
- Quality management systems: Concept of Quality, Total Quality 12 Management, Quality by design, Six Sigma concept, Out of Hrs Specifications (OOS), Change control. Validation: Types of Validation, Types of Qualification, Validation master plan (VMP), Analytical Method Validation. Validation of utilities, [Compressed air, steam, water systems, Heat Ventilation and Air conditioning (HVAC)]and Cleaning Validation. The International Conference on Harmonization (ICH) process, ICH guidelines to establish quality, safety and efficacy of drug substances and products, ISO 13485, Sch MIII and other relevant CDSCO regulatory guidance documents.

REFERENCES

- Good Laboratory Practice Regulations, by Sandy Weinberg, Fourth Edition Drugs and the Pharmaceutical Sciences, Vol.168
- 2. Good Pharmaceutical Manufacturing practice, Rational and compliance by John Sharp, CRC Press
- 3. Establishing a cGMP Laboratory Audit System, A practical Guide by David M.Bleisner, Wiley Publication.
- 4. How to practice GLP by PP Sharma, Vandana Publications.
- 5. Laboratory Auditing for Quality and Regulatory compliance bu Donald C.Singer, Drugs and the Pharmaceutical Sciences, Vol.150.
- 6. Drugs & Cosmetics Act, Rules & Amendments