QUESTION BANK

UNIT-1 PILOT PLANT SCALE UP TECHNIQUE

- 1. What do you mean by pilot plant scale-up? Give examples.
- 2. What is the significance of pilot plant scale-up with routine production procedure?
- 3. Explain the procedure for pilot plant scale-up for liquid orals.
- 4. Explain the procedure for pilot plant scale-up for semisolid dosage form.
- 5. Explain the procedure for pilot plant scale-up for liquid dosage form.
- 6. What do you mean SUPAC?
- 7. Write a short note on pilot plant scale-up for solid dosage form.

UNIT-2 TECHNOLOGY DEVELOPMENT AND TRANSFER

- 1. Define technology transfer. What is sending unit and receiving Unit? Write the principles of technology transfer.
- 2. Define the following terms:
 - (a) API
 - (b) Excipients
 - (c) DQ, IQ, OQ and PQ
- 3. What is the information required for technology transfer of starting materials from SU to RU?
- 4. Write briefly on the information required for process and finished product.
- 5. Write a note on analytical method transfer and basic responsibilities of SU and RU.
- 6. Which agencies are working for Technology Transfer in India? Write about any two agencies.
- 7. What is QRM? Describe the principle and process of QRM.

UNIT-3 REGULATORY AFFAIRS & REGULATORY REQUIREMENTS FOR DRUG APPROVAL

- 1. What is an NDA? Discuss the requirements of data while filing a NDA. Give examples where a NDA can be filed.
- 2. Comment on the bioequivalence requirements according to ICH guidelines.
- 3. Discuss the Intellectual Property protection laws in India in brief.
- 4. What is PCT? Discuss the content of PCT and its applications.
- 5. Write a note on Drug Master Files.
- 6. Briefly discuss Master Formula Record and its importance.

- 7. What are the elements of a clinical trial? Describe systematically the protocol of a clinical trial.
- 8. Write short notes on Pharmacovigilance.
- 9. Write short notes on Investigator Brochure.
- 10. Discuss the NDA regulatory approval process with suitable example.
- 11. Write a note on outsourcing BA-BE studies to CRO.
- 12. Write short notes on the Post marketing surveillance.

UNIT- 4 QUALITY MANAGEMENT SYSTEMS

- 1. Write a note on ICH guidelines.
- 2. Explain the principles of TQM and QBD.
- 3. Write about the six sigma concepts.
- 4. Define OOS. How will you find out the possible OOS in the results? Explain.
- 5. Write the basic principles of ISO 9000. Explain ISO 9000 series in detail. Write a note on requirements of ISO 9000 Series.
- 6. What is EMS? Write the basic working principle of ISO 14000 series. What are the advantages of it?
- 7. Write a short note on GLP and NABL.

UNIT- 5 INDIAN REGULATORY REQUIREMENTS

- 1. Explain the details of CDSCO and give its functions.
- 2. Write about various Drug Regulatory agencies.
- 3. Write details about different Central Drugs Testing Laboratories available in India.
- 4. Write short note on State Licensing authorities.
- 5. Explain about Central Drugs Laboratory and its function.
- 6. What is RDTL and its function?
- 7. What is COPP and its importance?
- 8. What are general requirements for submission of application for issue of COPP?
- 9. What is the procedure for accepting the application for issue of COPP?
- 10. What are the documents required for applying grating on revalidation of COPP?
- 11. What are the regulatory requirements and approval procedures for new drugs?