[Time: 3 Hours] [Max. Marks: 75]

Scale Up and Technology Transfer -II Q.P. CODE: 5142

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)

3 X 10 = 30 Marks

- Explain equipment qualification of Rapid Mixer Granulator in detail.
- 2. Explain pilot plant design of parenteral dosage forms in detail.
- 3. Define pollution. Enlist different types of pollutions. Explain the methods to control environmental pollution.
- 4. Describe analytical method of validation.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Explain types of process validation.
- 6. Explain the reasons and preventive measures for electrical hazards in pharmaceutical industry.
- 7. Explain the importance of technology transfer in pharmaceutical industry.
- 8. Describe validation report in cleaning validation.
- 9. Explain equipment qualifications of fluidized bed dryer.
- 10. Describe validation of liquid filling and sealing in pharmaceutical industry.
- 11. Enlist various members of validation team. Explain their responsibilities in validation.
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 * * * * 12. Draw a neat pilot plant layout of tablet dosage forms.
- 13. Explain the importance of vendors in equipment qualifications.
- Explain the importance of Validation Master Plan. 14.

