

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BPHARM
BRANCH: PHARMACY**

**SEMESTER: 7th
SESSION: MO/23**

SUBJECT: BP702T INDUSTRIAL PHARMACY-II

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. The missing data, if any, may be assumed suitably.
2. Before attempting the question paper, be sure that you have got the correct question paper.
3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
4. This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.

PART-I

Objective types questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20 Marks)

- L. Define Technology Transfer [CO1]
- M. Discuss Critical Control Point (CCP) [CO1]
- N. Define Drug Master File (DMF) [CO1]
- O. Define Performance Qualification and Operational Qualification [CO1]
- P. What is Process Validation? [CO1]
- Q. Differentiate between Quality Assurance and Quality Control [CO1]
- R. What do you understand by Receiving unit and Sending Unit? [CO1]
- S. Identify the uses of Standard Operating Procedure [CO1]
- T. State true or false: [CO1]
 - iii. Slugs ranging in diameter from 1 inch are more easily slugged than materials of 3/4th Inch in diameter.
 - iv. Multi-station Presses are termed rotary because the head that hold the upper punch, dies and lower punches in place rotates
- U. Cosolvency is a technique _____ [CO1]
- V. What do you mean by Validation Protocol and Validation Report? [CO1]

PART-II

Short Answers

(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

- Q2. Discuss the steps of Regulation of Drug approval Process with a flow chart. [CO2]
- Q3. Discuss Quality Risk management [CO2]
- Q4. Write a note on Preclinical drug Development [CO3]
- Q5. Discuss in detail the process of New Drug Application (NDA) [CO3]
- Q6. Discuss in brief QbD approach? [CO4]
- Q7. Explain principle and concept of TQM. Elaborate components of TQM. [CO4]
- Q8. Describe in brief GLP principles. [CO4]
- Q9. Discuss about ISO 9000 family. [CO4]
- Q10. Describe about NABL in short. [CO4]

PART-III

Long Answers

(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

- Q11. Discuss in details on Transfer from R& D to Production including Process , Packaging and Cleaning [CO2]
- Q12. Discuss about CDSCO and its function. Elaborate process of new drug approval. [CO5]
- Q13. Elaborate about implementation of ICH Q8, Q9, Q10 guidelines throughout the product life cycle [CO4]