Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY B.PHARM - SEMESTER- 7 EXAMINATION - WINTER -2024

Subject Code:BP706TT Date: 30-11-2024

**Subject Name: Quality Assurance** 

Time:10.30 AM TO 01.30 PM Total Marks: 80

**Instructions:** 

1. Attempt any five questions.

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a)	What are QA and QC? What are the responsibilities of QA and QC departments in Pharmaceutical plant?	06
	(b)	What are the requirements for sterile area manufacturing plant? How should be it maintained?	05
	(c)	Short Note: Quality control tests for rubber closures and containers.	05
Q.2	(a) (b) (c)	What is Quality Audit? Which documents are required for it? What is Qualification? Explain Various types of Qualification. What is TQM? Discuss the elements of TQM.	06 05 05
Q.3	(a) (b)	Write a note on principle and procedure for NABL accreditation.  Discuss about design, construction and plant layout for Pharmaceutical manufacturing plant according to GMP.	06 05
	(c)	What is the protocol for conduct of Nonclinical laboratory study? Discuss in brief.	05
Q.4	(a) (b) (c)	What is Validation? Give importance and scope of Validation. Write a note on: Master Formula Record. Write a note on: Good Warehousing Practice.	06 05 05
Q.5	(a)	What are Q-series guidelines? Discuss in brief about ICH stability testing guidelines.	06
	(b) (c)	What is QbD? Discuss the elements of QbD program. What should be the criteria for equipment selection? What is equipment purchase specification?	05 05
Q. 6	(a)	Which records and reports required to be maintained in laboratory according to GLP? Discuss about it.	06
	(b) (c)	What is SOP? Explain with one example.  Explain in brief about Calibration. How to calibrate pH meter?	05 05
Q.7	(a) (b)	What are ISO 9000 and ISO 14000? Discuss its steps for registration.  What is complaint? Explain its types and procedure for handling of complaints.  Explain Qualification of LIV-visible spectrophotometer.	06 05 05

\*\*\*\*\*