

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BVOC- SEMESTER- IV EXAMINATION – SUMMER 2023

Subject Code:21140401

Date:22-06-2023

Subject Name: RAC Piping Systems-II

Time:10:30 AM TO 12:30 PM

Total Marks:50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.
5. English version is authentic.

		Marks
Q.1	(a) Determine the design the diameter and wall thickness of pipe.	05
	(b) Write the procedure of pipe stress calculation.	05
Q.2	(a) Brief the Objectives and scope of piping stress analysis and list all type of piping load.	05
	(b) Explain any one flexibility analysis method use for pipe design.	05
OR		
Q.3	(a) Write short note on fabrication materials for piping systems.	05
	(b) Explain the term Fabrication and Erection in brief.	05
OR		
Q.3	(a) Explain fabrication processes for piping systems.	05
	(b) Explain about “Assembly alignment” in brief.	05
Q.4	(a) Explain Magnetic particle test.	05
	(b) Write the advantage and limitation of Radiographic examination.	05
OR		
Q.4	(a) Explain procedure to identify defects with the help of Ultrasonic test.	05
	(b) Write about dye penetrate test with neat diagram.	05
Q.5	(a) Explain pneumatic leak test use in pipe.	05
	(b) Explain static head, velocity head, and friction head in pipe.	05
OR		
Q.5	(a) Explain procedure to examine welds in Piping System.	05
	(b) Explain the procedure for preparation for leak test.	05
