

GUJARAT TECHNOLOGICAL UNIVERSITY**BVOC - SEMESTER-IV EXAMINATION – SUMMER 2022****Subject Code:1140401****Date:02-07-2022****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.

		Marks
Q.1	(a) Explain Dye Penetrant Test with neat diagram	05
	(b) What is the Procedure to identify defects with the help of Radiography test	05
Q.2	(a) Explain Magnetic particle test.	05
	(b) Write short note on Preparation for Leak Test.	05
	OR	
	(b) Write a note on Sensitive leak test.	05
Q.3	(a) Explain Fabrication Drawings.	05
	(b) Write Short note on Fabrication Materials for Piping Systems.	05
	OR	
Q.3	(a) Explain the term Fabrication and Erection in brief.	05
	(b) Explain Assembly and Erection process of piping fabrication in detail.	05
Q.4	(a) Write down the scope and objectives of piping stress analysis.	05
	(b) Write full form of NPSH. How it is useful in designing of pump.	05
	OR	
Q.4	(a) What do you mean by flexibility analysis and explain any one method.	05
	(b) Determine the design diameter and wall thickness of pipe.	05
Q.5	(a) Write the procedure of pipe stress calculation.	05
	(b) Define following terms: 1. Density 2. Viscosity 3. Surface Tension	05
	OR	
Q.5	(a) Explain primary and secondary loads.	05
	(b) Write a note on Cavitation in centrifugal pump in brief.	05
