Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– VIII (NEW) EXAMINATION – WINTER 2021

Subject Code:2181704 Date:29/11/2021

Subject Name:Project Engineering and Management

Time:10:30 AM TO 01:00 PM Total Marks: 70

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)**	Enlist various types of Project Engineering Documents.	**03**
	(b)	Explain importance of Bar (Gantt) chart related to project management	**04**
	(c)	Narrate various types of contracts in details.	**07**
Q.2	**(a)**	Enlist advantage and application of hydraulic system.	**03**
	(b)	What is calibration? Enlist importance of calibration.	**04**
	(c)	Enlist various types of flow measurement instruments and explain selection process of any two.	**07**
		OR	
	(c)	Describe various types of project management functions and explain project controlling and project planning, scheduling in details	**07**
Q.3	**(a)**	Classify various hazardous zone	**03**
	(b)	Discuss cavitations and flashing related to control valve	**04**
	(c)	Enlist various types of Temperature measurement instruments and explain selection process of any two.	**07**
		OR	
Q.3	**(a)**	Draw diagram for orifice plate installation for gas and slurry application	**03**
	(b)	Define : valve range ability and valve coefficient	**04**
	(c)	Write short note on CPM and PERT technique	**07**
Q.4	**(a)**	Why 4 -20 mA used as standard input?	**03**
	(b)	Define start up time. What are the problems faced during start up?	**04**
	(c)	Compare electronics, pneumatic and hydraulic system with examples.	**07**
		OR	
Q.4	**(a)**	What are the fundamental safety measures in industry?	**03**
	(b)	What are the types of S curve? Narrate importance of S curve	**04**
	(c)	Enlist various types of valve and explain selection process of control valve.	**07**
Q.5	**(a)**	Draw P & I diagram for split range control	**03**
	(b)	Write short note on process flow sheet	**04**
	(c)	Discuss ISO standard utility in industry? Explain ISO 9000 test standard.	**07**
		OR	
Q.5	**(a)**	Discuss control valve flow characteristics	**03**
	(b)	Explain cascade control with diagram.	**04**
	(c)	What is necessity of Loop check? Write check-out procedure for filled system temperature transmitter.	**07**

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