

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2181704****Date:15/05/2019****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.

		MARKS
<b>Q.1</b>	(a) Explain importance of project management related to Instrumentation engineering.	<b>03</b>
	(b) Enlist various documents related to project management.	<b>04</b>
	(c) Discuss various types of projects and contracts in details.	<b>07</b>
<b>Q.2</b>	(a) What is calibration? Explain calibration process of pressure gauge.	<b>03</b>
	(b) Compare EPC and BOOT types of project with example.	<b>04</b>
	(c) Enlist types of level instruments and describe its selection process.	<b>07</b>
<b>OR</b>		
	(c) Explain term: Project breakdown structure and planning cycle, project specification, and various charts related to project management.	<b>07</b>
<b>Q.3</b>	(a) What are the standards input and supply pressure in Instrumentation system? Discuss reason to use such standard.	<b>03</b>
	(b) What are the various types of S curve? Explain its importance with one example.	<b>04</b>
	(c) Compare CPM vs PERT technique with types of industry.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Explain in brief: estimation of activity time of project.	<b>03</b>
	(b) Define control valve coefficient	<b>04</b>
	(c) Discuss various types of project management functions and explain project controlling and project planning, scheduling in details.	<b>07</b>
<b>Q.4</b>	(a) Explain importance of wiring and tagging in control panel	<b>03</b>
	(b) Enlist various types of flow measurement techniques.	<b>04</b>
	(c) Enlist types of pressure instruments and describe its selection process.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) What is Loop check? Write check-out procedure for filled system temperature transmitter.	<b>03</b>
	(b) Classify hazardous locations as per NEC code.	<b>04</b>
	(c) Compare pneumatic, electric and hydraulic system with various points.	<b>07</b>
<b>Q.5</b>	(a) Explain concept of dead zero and live zero.	<b>03</b>
	(b) Define startup time. What are problem faced during this time?	<b>04</b>
	(c) Enlist various types of control valve used for slurry application. Write short note on control valve selection	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Write short note on Bar Chart and its application.	<b>03</b>
	(b) Narrate importance of instrument tagging.	<b>04</b>
	(c) What are the various types of ISO certification and standards? Discuss 9000 test and calibration standard.	<b>07</b>

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