

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII (NEW) EXAMINATION – SUMMER 2021****Subject Code:2181704****Date:05/08/2021****Subject Name:Project Engineering and Management****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

			<b>MARKS</b>
<b>Q.1</b>	(a)	Briefly explain the term Project Management.	<b>03</b>
	(b)	What is WBS? Briefly explain it.	<b>04</b>
	(c)	Why do we require Project S curve as a part of Project Management? Justify it with any suitable example.	<b>07</b>
<b>Q.2</b>	(a)	Explain BOOT contract with example.	<b>03</b>
	(b)	What is PERT? Explain it with example.	<b>04</b>
	(c)	Elaborate the functions of Project Management.	<b>07</b>
<b>OR</b>			
	(c)	List out various types of costs and explain CBS.	<b>07</b>
<b>Q.3</b>	(a)	What is loop wiring diagram? Briefly explain it.	<b>03</b>
	(b)	Compare pneumatic and electronic transmission systems.	<b>04</b>
	(c)	List out project engineering documents and explain them in brief.	<b>07</b>
<b>OR</b>			
<b>Q.3</b>	(a)	Define sizing coefficient for control valve and also list out few specifications of control valve.	<b>03</b>
	(b)	What is loop checking? Explain the role of all elements of closed loop control loop/ instrumentation loop.	<b>04</b>
	(c)	Discuss in detail the role of an Instrumentation Engineer in overall Instrument Project Control.	<b>07</b>
<b>Q.4</b>	(a)	What is intrinsic safety? Briefly explain it for process industry.	<b>03</b>
	(b)	What do you understand by the term Purchase Order? Explain it in brief.	<b>04</b>
	(c)	How will you select a specific control valve for any industrial process? Discuss the selection criteria for control valve in detail.	<b>07</b>
<b>OR</b>			
<b>Q.4</b>	(a)	What is electrical safety in engineering design? Briefly explain it	<b>03</b>
	(b)	Explain any one application of split range control valve.	<b>04</b>
	(c)	How will you select a specific flow instrument for any industrial process? Explain the selection criteria for flow instrument in detail.	<b>07</b>
<b>Q.5</b>	(a)	What is ISO? Why is it required?	<b>03</b>
	(b)	What are selection criteria for level instrument?	<b>04</b>
	(c)	Discuss plant startup procedure in detail.	<b>07</b>
<b>OR</b>			
<b>Q.5</b>	(a)	What are the quality management practices worldwide?	<b>03</b>
	(b)	What are selection criteria for pressure instrument?	<b>04</b>
	(c)	Discuss ISO 9000 quality system in detail.	<b>07</b>

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