

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VIII EXAMINATION – SUMMER 2026

Subject Code:2181704

Date:21-05-2026

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) What is “Project”? Explain importance of project management.	03
	(b) Briefly explain project S curve.	04
	(c) With suitable diagram and example explain life cycle phases of project engineering and management for any organization.	07
Q.2	(a) Which are then softwares used in Project Management? List out at least three names.	03
	(b) Explain Work Break Structure (WBS) and Cost Breakdown Structure (CWS)	04
	(c) Explain Project Management Functions in detail.	07
OR		
Q.3	(c) Explain PERT and CPM in detail as a part of Project Cost Estimation.	07
	(a) What is loop wiring diagram? Briefly explain it.	03
	(b) Explain project procedure and project schedule in brief.	04
	(c) List out project engineering documents and drawings and explain all in brief.	07
OR		
Q.3	(a) Briefly explain various elements of closed loop control loop/instrumentation loop.	03
	(b) Compare Electronic System Vs Pneumatic System	04
	(c) Explain the selection criteria for various types of control valves.	07
Q.4	(a) Briefly explain Intrinsic Safety.	03
	(b) Explain split range control valve with its applications.	04
	(c) Explain the selection criteria for various flow instruments.	07
OR		
Q.4	(a) What is calibration? Explain with example.	03
	(b) Explain pneumatic transmission system.	04
	(c) Explain selection criteria for various pressure instruments.	07
Q.5	(a) Explain EPC contract	03
	(b) Explain ISO 9000 Quality system	04
	(c) Explain good installation practices as a part of plant startup procedure.	07
OR		
Q.5	(a) Explain BOOT contract.	03
	(b) Explain quality management practices worldwide.	04
	(c) What is plant commissioning? Explain plant start ups procedure in detail.	07
