

GUJARAT TECHNOLOGICAL UNIVERSITY

BACHELOR OF ENGINEERING – SEMESTER 8 – EXAMINATION – SUMMER 2026

Subject Code: 2180611

Date: 25/05/2026

Subject Name: Construction 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.

- Q.1**
- (a) Explain the different phases of construction project 03
 - (b) Explain that why construction management is needed in Indian construction Industries. 04
 - (c) What is organization? Develop a organization chart of construction company 07

- Q.2**
- (a) Explain Factors affecting for success of a construction organization 03
 - (b) Explain the Effect of inflation on cash flow 04
 - (c) Explain the limitation of Bar chart 07
- OR
- (c) Draw a Bar chart of one story bungalow 07

- Q.3**
- (a) Define: Cost benefit ratio, construction economics 03
 - (b) Differentiate between CPM and PERT 04
 - (c) Develop a job layout for Construction of a commercial Building project. 07
- OR

- Q.3**
- (a) Explain the resource allocation by various method 03
 - (b) Draw the network from the following activity 04

Activity	Duration	Predecessor	successor
A	5	--	D
B	7	--	F
C	3	--	E
D	4	A	G
E	2	C	--
F	8	B	G
G	4	D, F	--

- (c) Develop a work breakdown structure for construction of Highway. 07

- Q.4**
- (a) Explain in detail construction quality assessment 03
 - (b) Explain in detail Total Quality Management 04
 - (c) Differentiate ISO standard and CONQUES system for quality 07

OR

- Q.4**
- (a) Describe accident causes in construction site 03

	(b) Explain the different safety & health management system used in Indian construction industries.	04
	(c) Explain the simplex method for linear programming	07
Q.5	(a) Define the term Cost code, ratio analysis, Balance sheet	03
	(b) Explain the role of safety personal at construction site	04
	(c) Explain the value engineering concept used in construction management.	07
	OR	
Q.5	(a) Explain the role of equipment in construction industry	03
	(b) Explain the limitation of accounting.	04
	(c) Explain the inventory management used in construction sector	07
