

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous Institute U/s UGC Act 1956)

B.Tech. SEMESTER-I, SEMESTER END EXAMINATION – WINTER 2025

SUBJECT CODE: 2CV102

DATE: 24-12-2025

SUBJECT NAME: BUILDING CONSTRUCTION TECHNOLOGY

TIME: 11:00 AM to 01:30 PM

TOTAL MARKS: 70

Instructions

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Write answers of **Section A** and **Section B** in **separate answer books**.
3. Attempt all questions from both **Section A** and **Section B**.
4. Each section carries **35 marks**, with a total of **70 marks** for the examination.
5. The figures to the right of each question indicate full marks, make suitable assumptions with justification.
6. BL - Cognitive Level (As per Revised Bloom's Taxonomy) (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

SECTION A

		Marks	BL	CO
Q.1	(a) State the requirements of good form work	03	R	5
	(b) What is cofferdam Write necessity of cofferdam	04	U	5
Q.2	(a) Differentiate between shallow foundation and deep foundation	03	U	1
	(b) Describe the process for setting out the foundation branches with Neat sketch	04	A	1
	(c) What is shallow foundation explain different types of shallow foundation	07	N	1
OR				
Q.2	(a) Write the objectives of soil exploration	03	U	1
	(b) List the various methods of soil exploration explain any one detail	04	A	1
	(c) What is Pneumatic Caisson write the procedure of sinking pneumatic caisson	07	N	1
Q.3	(a) Explain the term Queen closer, king closer and bevelled closer	03	U	2
	(b) Write the advantages and disadvantages of Dutch bond	04	A	2
	(c) Make a list of the types of bond in brickwork sketch the English bond and explain	07	N	2

OR

Q.3	(a) Distinguish between rubble masonry and Ashlar masonry	03	U	2
	(b) What is composite masonry write the various types of it explain anyone in detail	04	A	2
	(c) Explain in detail various types of Ashlar masonry	07	N	2

SECTION B

		Marks	BL	CO
Q.4	(a) What is termite proofing and why is it necessary?	03	U	6
	(b) Differentiate between damp-proofing and waterproofing.	04	A	6
Q.5	(a) Define the terms: (a) Rise (b) Going (c) Tread.	03	R	3
	(b) Explain different types of doors commonly used in buildings.	04	A	3
	(c) List the different types of staircases and explain the dog-legged staircase in detail.	07	U	3

OR

Q.5	(a) What is a ventilator? Where is it provided?	03	U	3
	(b) Show the technical terms related to stairs and staircase with neat sketch.	04	U	3
	(c) Explain in detail the factors affecting the selection of size, shape, location, and number of doors and windows in a building.	07	A	3
Q.6	(a) Define the following terms: (a) Subgrade, (b) Base course, (c) Wearing surface.	03	R	4
	(b) Compare a steel roof truss and timber roof truss.	04	N	4
	(c) Discuss in detail the construction and advantages of R.C.C. floors.	07	A	4

OR

Q.6	(a) List any three essential requirements of a good floor.	03	R	4
	(b) Compare a flat roof and a pitched roof.	04	A	4
	(c) Explain in detail the essential requirements and factors affecting the selection of flooring in buildings.	07	N	4
