



R20 Regulation

Subject code: 3P3AB

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

## B.Tech III Semester Supplementary Examinations, December 2025

### BUILDING MATERIALS AND CONSTRUCTION PLANNING (CE)

Maximum Marks: 70

Date: 30.12.2025

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

#### Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What is meant by igneous rock?	2M	1	L1
2	List the properties of first class brick.	2M	1	L1
3	Define admixtures.	2M	2	L1
4	Define consistency and initial setting of cement.	2M	2	L1
5	What is meant by lintel?	2M	3	L1
6	Differentiate between lime mortar and cement mortar.	2M	3	L1
7	Define shoring and give its uses.	2M	4	L1
8	List the three defects in plastering.	2M	4	L1
9	Define floor area ratio.	2M	5	L1
10	Sketch a typical foundation.	2M	5	L1

#### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Describe the characteristics of good building stones.	10M	1	L2
OR				
12	a) Name the three geological classes into which rocks can be divided. Describe the process of their formation. What are the important building stones which are derived from these rocks?	5M	1	L2
	b) Describe briefly effect of pain on unseasoned timber.	5M		
13	Describe with neat diagram the wet process of manufacture of the cement.	10M	2	L2
OR				
14	List and explain the chemical and mineral admixtures. Mention its uses.	10M	2	L2
15	How to do you classify the foundation. Explain each in detail with sketch.	10M	3	L2
OR				
16	What are the essentials of the Air-conditioning and explain the types?	10M	3	L2
17	Write short notes on following: a) Scaffolding b) Underpinning	5M 5M	4	L2

	OR			
18	a) Discuss any one type of the stone masonry with neat sketch. b) Explain about the properties and advantages of aluminum composite panel.	5M 5M	4	L2
19	Explain various practical points to be considered while planning a building.	10M	5	L2
	OR			
20	Classify the types of building and explain in detail.	10M	5	L2