



R22 Regulation

Subject code: 4E3AE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Regular Examinations, February 2024

BUILDING MATERIALS, CONSTRUCTION & PLANNING (CIVIL ENGINEERING)

Maximum Marks: 60

Date: 26.02.2024 Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
2. Part A is compulsory which carries 10 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		CO	Bloom Tx
All the following questions carry equal marks (10x1M=10 Marks)			
1.a)	List out the characteristics of good tiles?	1	IV
b)	What do you understand by frog?	1	I
c)	What are admixtures?	2	I
d)	Define specific gravity?	2	I
e)	What are the different types of foundations?	3	I
f)	Define acoustic design?	3	I
g)	What are the types of masonry?	4	I
h)	What is the purpose of plastering?	4	I
i)	Write the necessity of building bye – laws?	5	I
j)	List out the factors to be considered in selecting a good site for building?	5	IV
Part-B			
Answer All the following questions. (5X10M=50Marks)			Bloom Tx level
2	a. Explain different methods for manufacturing of bricks. [5m]	1	II
	b. Explain the structure of timber & its parts with neat sketch. [5m]	1	II
OR			
3	a. What are the various methods of quarrying of stones? Explain each method briefly? [5m]	1	II
	b. List out various properties of flyash & its uses. [5m]	1	IV
4	a. List out laboratory tests on cement and explain any one test? [5m]	2	IV
	b. Classify the different types of admixtures? [5m]	2	IV
OR			
5	a. Describe with flow diagram the wet process of manufacturing of cement? [5m]	2	II
	b. Briefly explain about hydration of cement. [5m]	2	II
6	a. Summarize the classification of stairs & their requirements. Explain R.C.C staircase? [5m]	3	II
	b. Explain briefly the requirement of ventilation in residential building. [5m]	3	V

	OR		
7	a. Describe the acoustical design of a hall. [5m] b. Explain briefly classification of fire – resistant materials. [5m]	3 3	II II
8	a. What are the stages involved in construction of formwork? Explain briefly. [5m] b. Explain the basic objectives of underpinning in construction? [5m]	4 4	II II
	OR		
9	a. Define plastering, give its types. [5m] b. Explain the procedure of plastering on new surface. [5m]	4 4	II II
10	a. Explain the classification of buildings. [5m] b. Explain briefly about bye-laws for plinth area requirements. [5m]	5 5	II III
	OR		
11	A residential building is to be constructed to accommodate a family of four members. Draw the line diagram of the building & explain the principles of your planning. [10m]	5	V