



R22 Regulation

Subject code: 4E3AE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Supplementary Examinations, July 2024

**BUILDING MATERIALS, CONSTRUCTION & PLANNING
(CIVIL ENGINEERING)**

Maximum Marks: 60

Date:27.07.2024 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)	Write the precautions to be taken on the blasting process?	1	I
b)	Define the term dressing?	1	I
c)	What are the ingredients of Portland cement?	2	I
d)	List out the mineral admixtures and its uses?	2	I
e)	What do you understand by the term fire hazards?	3	I
f)	What are the different types of floors?	3	I
g)	Differentiate between plastering & pointing?	4	I
h)	What do you understand by scaffolding?	4	I
i)	List out the factors to be considered in selecting a good site for building?	5	I
j)	Explain the objectives of building bye – laws?	5	I
Part-B			
Answer All the following questions. (5X10M=50Marks)			
2	A. What is decay in timber? How is it detected? How can be the timber guarded against its decay? [5]	1	I
	B. Describe the characteristics of good building stones. [5]	1	II
OR			
3	A. List out the various ingredients of brick earth. [5]	1	II
	B. What are the properties of glass? Types of glasses? [5]	1	I
4	How do you conduct the following tests on a given cement sample [5+5]		
	a) Initial & final setting time of cement	2	I
	b) Soundness of cement	2	I
OR			
5	A. Briefly explain about chemical admixtures & its uses. [5]	2	II
	B. Explain dry method of manufacturing process of cement. [5]	2	II
6	A. Define air – conditioning and explain any one method of air conditioning. [5]	3	I
	B. Draw the queen post truss & mention its parts. [5]	3	II
OR			

7	Elaborate various types of foundations used for building with neat sketches. [10]	3	II
8	A. Differentiate between brick masonry & stone masonry. [5]	4	II
	B. What do you mean by shoring & explain various methods. [5]	4	I
	OR		
9	A. Mention the objectives of providing painting & plastering to the proposed surface. [5]	4	II
	B. Explain briefly about distemper. [5]	4	II
10	A. Classify the buildings based on occupancy & type of construction. [5]	5	II
	B. Briefly explain about [5]	5	
	i) roominess ii) flexibility		I
	OR		
11	A. What is the importance of open space requirements according to building bye-laws? [5]	5	I
	B. Describe the procedure to submit a plan. [5]	5	II