R20 Regulation *Subject code: 3P3AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Supplementary Examinations, June 2026

BUILDING MATERIALS AND CONSTRUCTION PLANNING

(CE)

Maximum Marks: 70 Date: 11.06.2026 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	Differentiate between natural and artificial seasoning.	2M	1	L1
2	List out the types of rocks.	2M	1	L1
3	Define admixture and give two examples of admixtures.	2M	2	L1
4	Name some tests conducted on cement.	2M	2	L1
5	Write the requirements of ventilation in residential buildings.	2M	3	L1
6	List out components of stair case.	2M	3	L1
7	What are the requirements of the good formwork?	2M	4	L1
8	List the three defects in plastering.	2M	4	L1
9	Define floor area ratio.	2M	5	L1
10	List types of foundations.	2M	5	L1

Part-B

	Answer All the following questions. (5X10M=50Marks)	Marks	CO	BTL
11	a) Discuss the methods of preserving. b) What are the various properties of flyash and its use.	5M 5M	1	L2
	OR			
12	a) Describe common defects in brick. Describe the tests performed to check brick quality. b) Explain the detailed the process of manufacturing of glass.	5M 5M	1	L2
13	Describe with neat diagrams the dry processes of manufacturing of cement and list out types of admixtures.	10M	2	L2
	OR			
14	List and explain the chemical and mineral admixtures. Mention its uses.	10M	2	L2
15	Describe types of the foundations and explain with neat diagrams.	10M	3	L2
	OR			
16	a) With neat sketches explain different types of arches. b) Mention the different types of roofs.	5M 5M	3	L2

17	Explain in detail with neat sketch of any two types of stone masonry.	10M	4	L2
	OR			
18	a) What are the functional requirements for good ventilation? b) Compare brick masonry and stone masonry.	5M 5M	4	L2
19	a) Write principles of building planning. b) What do you understand by development control rules?	5M 5M	5	L2
	OR			
20	Classify the building types and explain in detail.	10M	5	L2