



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

	InSem Examination-I Winter 2023		
	Exam Seat No.:		
	Academic Year:2023-2024	Semester:III	
	Name of Programme: B.Tech (Civil Engineering)	Pattern:2022	
	Name of Course: Architectural Planning and Design	Course Code:CIV222004	
	Max. Marks:30	Duration:1 hr	

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 3 page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question

**Question No. 1 Attempt following Question**

a) Describe English Bond and Flemish bond. (5) CO1

**OR**

b) Which type of foundations is suitable in following conditions?

i. Black cotton soil

ii. Column is at the edge of plot

Explain the reason

(5) CO1

c) List out all the buildings according to NBC and explain Residential building. (5) CO1

**OR**

- d) Explain following
- i. Bat
  - ii. Queen closer
  - iii. Frog
  - iv. Bevelled closer
  - v. King Closer
- (5) CO1

- e) Explain the characteristic of Good Formwork. (5) CO1

**OR**

- f) Explain Trestle scaffold with a neat sketch. (5) CO1

**Question No. 2 Attempt following Question**

- a) Explain the following principles of building planning
- i. Aspect
  - ii. Prospect
  - iii. Grouping
- (5) CO2

**OR**

- b) Explain Building line and Control line and Purpose of providing Building line & Control line. (5) CO2
- c) Explain Built up area and Carpet area in detail. (5) CO2

**OR**

- d) Explain following terms:
- i. Detached Building,
  - ii. Semidetached building,
  - iii. Row house
- (5) CO2

e) Explain Architectural principle of planning.

(5) CO2

i. Balance

ii. Rhythm

iii. Emphasis

iv. Proportion and scale

**OR**

f)

A plot owner proposed a G+1 storey structure with  $200\text{m}^2$  built up area on each floor. The plot size is 20m x 17 m. Find FSI, if all side margins are 2m. If the allowable FSI allowed in area is 1.2, state whether the plan will be sanctioned or not

(5) CO2