

# Model Question Paper-1 with effect from 2019-20 (CBCS Scheme)

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## Fourth Semester B.E. Degree Examination

### Subject Title: Materials and Methods in Building Construction-IV

TIME: 04 Hours

Max. Marks: 100

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.  
 02. Make sketches where ever necessary  
 03. Assume and mention dimensions where necessary

Module -1			*Bloom's Taxonomy Level	Marks
Q.01	a	Define RCC rigid frame?	L1	5
	b	Provide sketches showing RCC rigid reinforcement in column to beam junction? 1. Beam column End condition		7.5
	c	Provide reinforcement detail in rcc frame foundation, isolated footing showing tie beam?	L1,L3	7.5
OR				
Q.02	a	Differentiate between flat plate and flat slab?	L4	8
	b	Define the importance and necessity with sketch? Drop panel Column head Mid span Column span	L1,L3	4*3=12
Module-2				
Q. 03	a	What are the principles for constructing a filler slab ?	L4	5
	b	Make a section and plan showing reinforcement of filler slab for span of 5M*5M ?	L1,L3	15
OR				
Q.04	a	Differentiate between waffle slab and ribbed slab ?	L4	5
	b	An entrance porch to a hotel, spans 10 m*7m, design waffelslab ? 1. section showing reinforcement? 2. One detail? 3. Plan showing column placement?	L2,L3,L4,L6	3*5=15
Module-3				
Q. 05	a	What are the different types of steel used in construction & sketch to mention its form and uses?	L1,L2	10
	b	Sketch compound sections and mention their uses ?	L1,L2	10
OR				
Q. 06	a	Draft elevation for steel door sharing frame with a casement window?	L6	8
	b	Elaborate with sketches any two details for the above?	L1.L2	2*6=12

<b>Module-4</b>				
Q. 07	a	What is a rolling shutter and what are the different types based on shutter panel?	L2	8
	b	Draw section and elevation of rolling shutter	L1,L2	2*6=12
OR				
Q. 08	a	A bank needs to be provided with a collapsible gate draw its elevation?	L3	8
	b	Detail three joinery for a collapsible gate ?	L1,L2	3*4=12
<b>Module-5</b>				
Q. 09	a	Design two leaf aluminum windows accommodating a mesh panel also? Opening size 1200x2100? draft plan section and elevation	L6	20
OR				
Q. 10	a	Sketch 3 standard aluminum sections in a partition, details showing glazing fixing? 1. Top rail 2. Middle rail 3. Bottom rail	L1	3*5=15
	b	Elaborate on aluminum as building material with advantages?	L4	5

\*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.