GBCS SCHEME

Second Semester B.Arch. Degree Examination, Dec.2017/Jan.2018 Materials and Methods in Building Construction - II

Time: 4 hrs.

as malpractice

remaining blank pages. eg, 42+8 = 50, will be treated

3

Max. Marks: 100

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- A verandha 3m wide and 6m long is to be provided with lean to wooden roof finished with mangalore tiles laid over it. Draw to suitable scales.
 - Plan

(04 Marks)

Section

(10 Marks)

Any two details

(06 Marks)

OR

Explain with neat sketches: 2

(05 Marks)

Steel Trusses King Post Trust

(05 Marks)

Pitched roof in detail

(10 Marks)

- What are the ingredients of reinforced cement? (10 Marks)
- What are the types of cement? Explain briefly the application of each type.

(10 Marks)

- OR
- Write short notes on:
 - a. Water Cement ratio

(05 Marks)

b. Explain Grade of Concrete

(05 Marks)

c. Admixtures

(05 Marks) (05 Marks)

d. Bulking of sand

Module-3

A column of size 230mm × 230mm has to be provided with an RCC isolated footing 1200mm × 1200mm. Draw the detailed drawing for the suitable scale. Assuming necessary diameter and spacing draw the following:

Plan a.

(06 Marks)

Section b.

(06 Marks)

Isometric view

(08 Marks)

OR

Write short notes on:

a Curing of concrete

(05 Marks)

b. Grillage foundation

(05 Marks)

c. Expansion Joint and Construction Joint

(05 Marks)

Raft Footing

(05 Marks)

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the equations Any revealing of identification, appeal to evaluator and /or

	1	N	Module-4	0
7		aw a single stringer timber staircase in	1:10 scale labeling all the necessary parts.	Following
	are	the requirements:		
	a.	Plan	(2)	(05 Marks)
	b.	Sectional Elevation		(05 Marks)
	c.	Two enlarged details		(10 Marks)
OR				
8		Explain with neat sketches:		
	a.	Types of stairs		(05 Marks)
	b.	RCC Waist slab		(05 Marks)
	c.	Stone stair	reported the second of the sec	(05 Marks)
	d.	Folded type stairs in RCC		(05 Marks)
Module-5				
9 Design a fire escape stair for an apartment building. Assuming the typical f				eight to be
	31:	50 mm. Draw to suitable scales.		
	a.	Plan	/ ₁ 65	(05 Marks)
	b.	Section	4/20	(05 Marks)
	c.	Longitudinal section	Charles and the second second	(05 Marks)
	d.	2 enlarged details		(05 Marks)
\sim OR				
10		Explain with neat sketches:		
	a.	Steel Spiral stair		(07 Marks)
	b.	Brick Stone stair		(06 Marks)
	c.	Steel Glass stair	(2)	(07 Marks)
		(C)		(0,1,1,1,1,1,0)
		170	****	
			5	