C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name : Building Construction

Subject Code: 4TE03BCN1 **Branch**: B.Tech(Civil)

Semester : 3 Date : 22/04/2016 **Time :** 02:30 To 05:30 **Marks :** 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1		Attempt the following questions:	(14)
	a)	Define building as per National Building Code of India.	01
	b)	What is meant by 'shallow foundation'?	01
	c)	Define shoring.	01
	d)	What is underpinning?	01
	e)	What is meant by scaffolding?	01
	f)	Define with sketch: Queen closer.	01
	g)	Gives reason: Timber floors are provided in auditoriums.	01
	h)	Define nosing with figure in relation to stair.	01
	i)	What are casement windows?	01
	j)	Define eaves board.	01
	k)	Define common rafter.	01
	,	What is rebate?	01
	m)	What is fire resistant construction?	01
	n)	What are cleats?	01
Attem	pt any	four questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
	(a)	Write a short note on Ashlar stone arches.	05
	(b)	Discuss briefly, the various requirements of a good stair.	05
	(c)	Draw the sketch of building components.	04
Q-3		Attempt all questions	(14)
	(a)	Explain in brief the essential requirements of a floor.	05
	(b)	Write short note on "Dutch bond".	05
	(c)	Differentiate between English bond and Flemish bond.	04
Q-4		Attempt all questions	(14)
	(a)	Describe with neat sketch Dog-legged stair.	05
	(b)	Write advantages and disadvantages of flat roof.	05
	(c)	Differentiate between Helical stair and Spiral stair.	04
Q-5		Attempt all questions	(14)
	(a)	Describe the classification of different types of buildings.	07

	(b)	What is foundation? Discuss the various functions of foundation.	07
Q-6		Attempt all questions	(14)
	(a)	What are the basic characteristics of black cotton soil? What precautions should be taken during foundation construction in black cotton soil?	07
	(b)	Classify various types of lintels and discuss each with sketches.	07
Q-7		Attempt all questions	(14)
	(a)	What are the essential requirements of a floor? Explain marble flooring with sketch.	07
	(b)	Write the factors affecting selection of size, shape, location and number of windows. Sketch casement window and label various components of window on it.	07
Q-8		Attempt all questions	(14)
	(a)	Explain systems and construction features of RCC frames.	07
	(b)	What is the difference between plastering and pointing? Discuss cement mortar plastering.	07

