Enrollment No: Exam Seat No:

C.U.SHAH UNIVERSITY

Winter Examination-2015

Subject Name: Building Construction

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

Semester: 3 **Date:** 03/12/2015 **Time:** 2:30 To 5:30 **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)
8	The lowest part of a structure which transmits the load to the soil is known as (A) super-structure (B) plinth (C) foundation (D) basement	01
1	The minimum load which will cause failure of a foundation is called (A) ultimate tensile strength (B) nominal strength	01
((C) ultimate bearing power (D) ultimate compressive strength When the walls are subjected to heavy loading and the bearing capacity of the soil is very low, then the wall is constructed on (A) reinforced concrete footing (B) column footing 	01
•	(C) lean concrete footing (D) none of these When two or more footings are connected by a beam, it is called (A) beam footing (B) combined footing	01
•	 (C) strap footing (D) mat footing The brick laid with its length perpendicular to the face of the wall is called a (A) course (B) header (C) stretcher (D) closer 	01
i	A brick which is half as wide as a full brick, is called (A) queen closer (B) king closer (C) mitred closer (D) bevelled closer	01
	A horizontal member of stone, concrete or wood provided to give support for the vertical members of a wooden window, is called (A) jamb (B) reveal (C) quoin (D) sill	01
1	The minimum thickness of a wall in stone masonry should not be less than (A) 100 mm (B) 350 mm (C) 450 mm (D) 200 mm	01
i	The moulding provided under nosing to beautify the elevation of a step of stair, is called	01
j	 (A) flier (B) soffit (C) scotia (D) tread The horizontal members of wood or steel used to support the common rafter of a sloping roof, are called (A) purlins (B) cleats (C) hip rafters (D) valley rafters 	01



	k)	The type of truss commonly used for spans varying from 5 to 9 metre is	01
		(A) queen post truss (B) king post truss	
		(C) mansard truss (D) composite truss	
	l)	The process of filling up all mail holes, cracks etc. with putty is known as	01
		(A) knotting (B) priming (C) stopping (D) finishing	
	m)	The pointing which is extensively used in brick work and stone masonry face work,	01
		is	
		(A) flush poining (B) struck pointing	
		(C) V-grooved pointing (D) tuck pointing	
	n)	The combination of a king-post truss and queen post truss is known as	01
		(A) couple roof (B) collar beam roof	
		(C) mansard roof (D) purlin roof	
_	ot any f	our questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
	(a)	Briefly describe the causes of failure of foundation and their remedial measures.	05
	(b)	What is meant by scaffolding? Discuss the essential requirements of it.	05
	(c)	Compare stone masonry and brick masonry.	04
Q-3		Attempt all questions	(14)
	(a)	Write short note on grillage foundation.	05
	(b)	Explain with the help of sketches the provision of various types of horizontal	05
		reinforcement in reinforced brick masonry.	
	(c)	Draw a sketch of an arch and show on it various technical terms used in its	04
		construction.	
Q-4		Attempt all questions	(14)
	(a)	Describe the different types of buildings components in detail.	07
	(b)	Writes size of brick. Enlist types of bond in brickwork. Explain with sketch header	07
		and stretcher bond.	
Q-5		Attempt all questions	(14)
	(a)	What are the different types of spread footing? Explain with sketches.	07
	(b)	Explain the procedure for construction of marble flooring.	07
Q-6		Attempt all questions	(14)
	(a)	Explain classification of stair as per the material used.	07
	(b)	Enlist various types of doors and explain flush door and collapsible steel door with	07
		figure.	
Q-7		Attempt all questions	(14)
	(a)	Explain in detail pitched roof.	07
	(b)	Explain structural and construction features of steel frames.	07
Q-8		Attempt all questions	(14)
	(a)	Write short note on cork flooring.	05
	(b)	Explain water proofing of the building.	05
	(c)	Explain object and requirement of good plaster.	04

