

C.U. SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Building Construction

Subject Code: 4TE03BCN1

Branch: B.Tech (Civil)

Semester: 3

Date: 29/11/2018

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.

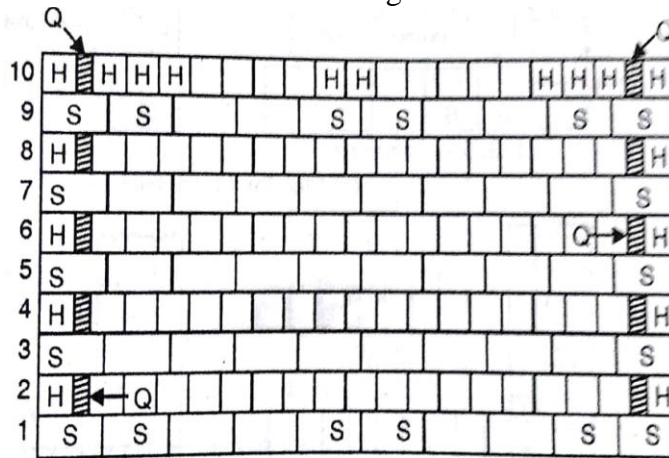
Q-1

Attempt the following questions:

(14)

a) Name the bond as shown in figure.

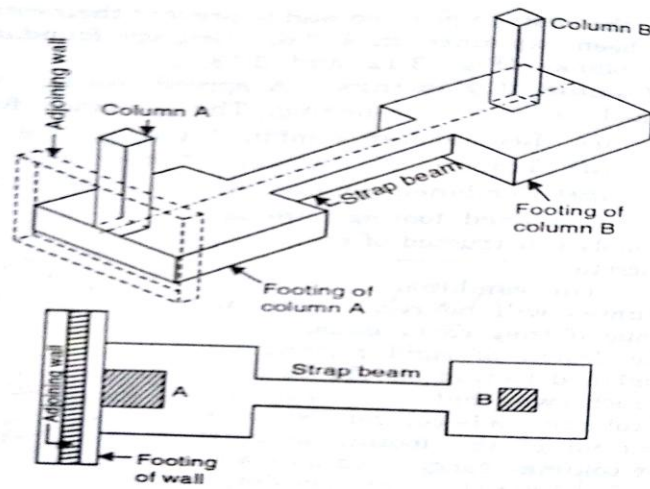
1



S = Stretcher ; H = Header ; Q = Queen closer

- b) What is the mix proportion utilize for mortar in plastering work? 1
- c) What are the different types of roof? 1
- d) For large spans the most suitable type of roof preferred is..... 1
- e) Enlist various components of building. 1
- f) What is steel frame structure? 1
- g) Define pointing. 1
- h) What do you understand by a “shallow foundation”? 1
- i) Draw a plan and section of single flight. 1
- j) In airconditioned buildings a door has to serve both purposes of opening and closing and the most suitable type of door is..... 1
- k) How do you determine the consistency of mortar? 1
- l) What do you understand by the term “Anti-termites treatment”? 1
- m) Brick floors are used in..... 1
- n) Name the foundation as shown in figure. 1





Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
- (a) Give sketches of king-post truss and queen-post truss. Compare the two. (7)
- (b) Explain various types of plaster finishes. (7)
- Q-3 Attempt all questions (14)**
- (a) Explain the method of constructing cement concrete flooring. What is the use of granolithic finish and how is it made? (7)
- (b) Discuss the various consideration made in planning of stair cases. Illustrate the different types of stair cases generally used, indicating their suitability for specific use. (7)
- Q-4 Attempt all questions (14)**
- (a) Classify, with the help of sketches, various types of windows based on their method of operation or opening. (7)
- (b) Write a short note on: Building frame (7)
- Q-5 Attempt all questions (14)**
- (a) What are the causes of failure of foundation? What remedial measures would you adopt? (7)
- (b) What are the points to be keep in mind during supervision of stone masonry construction? (7)
- Q-6 Attempt all questions (14)**
- (a) Explain the method of pointing. (4)
- (b) Write a note on various defects in plastering. (3)
- (c) Explain how do you achieve fire-resistance construction of the following element: (7)
- (a) Walls and column
- (b) Floors and roofs
- Q-7 Attempt all questions (14)**
- (a) Enumerate different types of foundations you would recommend under different situations and soil conditions. Explain them briefly. (7)
- (b) Compare brick and stone masonry. (7)
- Q-8 Attempt all questions (14)**
- (a) Explain the factors that affect the strength of brick masonry. (7)
- (b) Write a note on various components of a building. (7)

