

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C. U. SHAH UNIVERSITY

## Winter Examination-2020

**Subject Name: Building Construction**

**Subject Code: 4TE03BCN1**

**Branch: B.Tech (Civil)**

**Semester: 3**

**Date: 09/03/2021**

**Time: 11:00 To 02:00**

**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) The load of equipment and furniture kept in a building is termed as 1  
(a) Dead load (b) Live load (c) Designed load (d) All are wrong
  - b) The minimum thickness of a wall in stone masonry cannot be less than 1  
(a) 10 cm (b) 20 cm (c) 35 cm (d) 50 cm
  - c) In multistoried government buildings, the floor height is usually restricted 1  
to  
(a) 2 meters (b) 2.4 meters (c) 3.4 meters (d) 4.2 meters
  - d) The least bearing capacity of soil is that of 1  
(a) Hard rock's (b) Moist clays (c) Soft rocks (d) Laminated rocks
  - e) The number of steps in a flight should not be less than 1  
(a) 12 (b) 3 (c) 2 (d) 5
  - f) The material, used in making of door frames are 1  
(a) Wood (b) Steel (c) Aluminum (d) All the above
  - g) Brick floor are used in 1  
(a) Workshops (b) Railway platform (c) Godowns (d) Verandahs
  - h) D. P. C. may be 1  
(a) Vertical (b) Horizontal (c) Both (a) and (b) (d) None of the above
  - i) The minimum depth of foundation below the ground level is 1  
(a) 60 cm (b) 90 cm (c) 120 cm (d) 150 cm
  - j) While laying bricks in a wall, frog of the brick must be kept 1  
(a) Upward (b) Downward (c) Sideward (d) In any position
  - k) The surface to which the first coat of plaster is applied is called 1  
(a) Base surface (b) Preliminary surface  
(c) Ground surface (d) Background surface
  - l) The sum of tread and rise should lie between 1  
(a) 35 – 40 cm (b) 50 – 55 cm (c) 40 – 45 cm (d) 55 – 60 cm
  - m) For large spans the most suitable type of roof preferred is 1  
(a) Flat roof (b) Slopy roof (c) Shelled roof (d) Domes
  - n) As compared to the floor area of a room, the glass in a window should not 1  
be less than



(a) 25% (b) 20% (c) 15% (d) 50%

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

<b>Q-2</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Describe the construction features and suitability of pile foundation. Also discuss about the various types piles.	<b>7</b>
<b>B</b>	Enumerate the various components of building and different types of loads acting on structure.	<b>7</b>
<b>Q-3</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Define shallow foundation and Deep foundations. Explain the necessity of shallow and deep foundations.	<b>7</b>
<b>B</b>	Write the comparison between brick masonry and stone masonry.	<b>7</b>
<b>Q-4</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Define the following terms also with a neat sketch. Header, Stretcher, Bond, Quion, Queen closer, King closer, Bevelled closer.	<b>7</b>
<b>B</b>	Enumerate the various types of flooring and explain any five types of flooring.	<b>7</b>
<b>Q-5</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain the various classifications of Stairs with a neat sketch.	<b>7</b>
<b>B</b>	Define door and window and also explain the functions and location of doors and windows.	<b>7</b>
<b>Q-6</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Describe in detail about the painting on different surfaces and explain any three in detail.	<b>7</b>
<b>B</b>	Write a short note on: Building frame.	<b>7</b>
<b>Q-7</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Describe the method of damp proofing in building for the following. (i) Treatment to Foundation.                      (ii) Treatment to basement. (iii) Treatment to floor.	<b>7</b>
<b>B</b>	Write short note on building maintenance.	<b>7</b>
<b>Q-8</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Discuss in detail about the various types of flat terraced roofing.	<b>7</b>
<b>B</b>	Define plastering. Write the objects and requirements of good plastering.	<b>7</b>

