Seat	
No.	

[5252]-101

## S.E (Civil) (I Sem.) EXAMINATION 2017 BUILDING TECHNOLOGY AND MATERIALS (2012 PATTERN)

Time: Two Hours

Maximum Marks: 50

- N.B. :— (i) Answer Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6 Q. 7 or Q. 8.
  - (ii) Neat diagrams must be drawn wherever necessary.
  - (iii) Figures to the right indicate full marks.
  - (iv) Assume suitable data, if necessary.
- 1. (a) It is proposed to construct a residential building on black cotton soil. Which type of foundation is suitable in such condition?

  Comment with reasons. [6]
  - (b) What is underpinning? Explain the Pit method with labeled figure. [6]
- **2.** (a) Where is Coursed rubble masonry being used? Explain course rubble masonry with a neat and labeled figure. [6]
  - (b) Enlist types of plastering. Explain advantages and limitations of gypsum plaster. [6]
- **3.** (a) With a neat and labeled figure explain chequer method of floor construction. [6]
  - (b) Draw a neat and labeled figure of semicircular arch. [6]

4.	(a)	Explain the advantage and disadvantage of flat roofs.	[6]	
	(b)	Explain with neat sketches any <i>three</i> types of hinges for doors and windows.	[6]	
		for doors and windows.	լսյ	
<b>5.</b>	(a)	Discuss the requirements of a good staircase with reference		
		to:	[7]	
		(i) Location		
		(ii) Materials		
		(iii) Width and length of stair		
		(iv) Pitch of stair		
		(v) Headroom		
		(vi) Rise and Tread and		
		(vii) Number of steps in a flight.		
	( <i>b</i> )	Write a short note on wall cladding.	[6]	
6.	(a)	Write short notes on :	[6]	
		(i) Elevators		
		(ii) Ramps.		
	( <i>b</i> )	Write a note on "Defects in Painting".	[7]	
7.	(a)	Explain the precautions to be taken for storing material	s on	
		site.	[6]	
	( <i>b</i> )	What is shoring? Explain Raking shores.	[7]	
8.	(a)	Write short notes on :	[7]	
		(i) Defects in timer		
		(ii) Types of Glass and their properties used in construc	ction	
	( <i>b</i> )	Write a note on Ceramic products in construction".	[6]	