brick all around and trench size 0.9 m wide and 1.2 m in depth. Take one door of 0.9 m wide and 2.1 m high and one window 0.9 $\mathrm{m} \times 0.9 \mathrm{~m}$ having sill at 1.2 m from FFL.
8. Write a short note on how we will ensure that an underconstruction 0.23 m thick, 3 m high and 4 m long brick wall is laid straight horizontally and vertically. Explain the instruments which you will use to check its horizontal and vertical correctness.

Roll No. $\qquad$

## 2017

B. Arch. EXAMINATION, May 2017

(Second Semester)<br>(Old Scheme) (Re-appear Only)<br>( ARCH )<br>AR-116-G<br>SURVEYING-II

Time : 3 Hours]
[Maximum Marks : 50
Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt Five questions in all, selecting at least one question from each Section. All questions carry equal marks. Make sketches wherever needed.
P.T.O.

## Section A

1. Write short notes on any five classification of surveying based upon the instrument employed.
2. Write short notes on the following and explain with the help of sketches :
(a) BM
(b) HI
(c) BS
(d) FS
(e) TP .

## Section B

3. What is chain surveying and also explain any four cases where it is most suitable. Reinforce your answer with sketches.
4. What is compass surveying ? Write types of compass surveying and also write down any five uses of compass surveying and explain with sketches.

## Section C

5. The following consecutive readings were taken with a level and a 4 m staff on continuously sloping ground at a common interval of 30 m ; $0.780,1.535,1.955,2.430,2.985,3.480,1.155$, $1.960,2.365,3.640,0.935,1.045,1.630$ and 2.545. The reduced level of the first pint was 180.750. Rule out a page of a level field book and enter the above readings. Calculate the reduced levels of the points by the rise and fall method and also the gradient of the line joining the first and last points.
6. What is Contour? Write any five properties of contours and also write any four principal considerations on which the choice of suitable contour interval in a map depends upon?

## Section D

7. Write short note on setting-out a trench for a square guard house measuring $3 \mathrm{~m} \times 3 \mathrm{~m}$ (clear internal dimensions) having 0.23 m thick
P.T.O.
