

GEOMETRICAL AND BUILDING DRAWING

Maximum Marks: 80

Time Allowed: Three hours

*(Candidates are allowed **additional 15 minutes** for **only** reading the paper.
They must **NOT** start writing during this time).*

Question 1 is compulsory.

Answer any two questions from Question 2, Question 3 and Question 4.

The intended marks for questions are given in brackets [].

Read carefully the following notes before commencing:

- (i) All dimensions are in millimetres.
- (ii) Drafting should be accurate, neat and clear.
- (iii) The drawing must be done in pencil, clearly dimensioned and annotated.
- (iv) Wherever dimensions are not given, adopt suitable dimensions.
- (v) Write your unique identification number (UID) and index number at the bottom right-hand corner of your paper.

Question 1

[20]

Draw the difference between uncoursed rubble masonry and coursed rubble masonry, with neat free hand sketches.

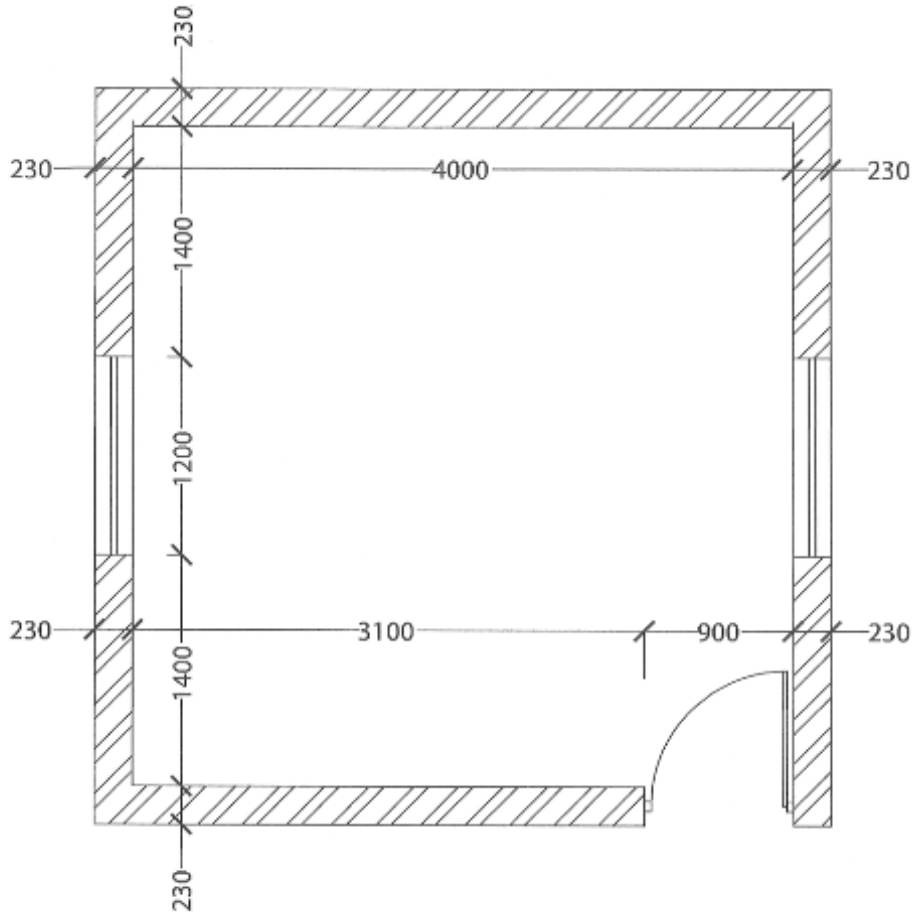
Question 2

[30]

Draw Plan and Section of a Dog-legged Staircase to 1:10 scale.
Width of the staircase is 3000mm & height of the respective floor shall be 3300mm.
Calculate the number of Treads and Risers accordingly.

Question 3**[30]**

Draw any Section of the room as shown below, showing all the details from foundation to parapet wall to suitable scale. The section should indicate single storeyed buildings with flat RCC roof.

**Question 4****[30]**

Draw free-hand sketches to illustrate the following terms and give definitions:

- (i) Riser & Tread.
- (ii) Cross Section of Reinforced concrete lintel with *chajja* projection.
- (iii) Plan arrangement of Herring Bone Bond.
- (iv) Newel Post.
- (v) Wall Footings.