Scheme - I

Sample Question Paper

Program Name : **Diploma in Civil Engineering**
Program Code : **CE**
Semester : **Fourth**
Course Title : **Building Planning and Drawing**
Marks : **70**

22405

Time:4Hrs.

Instructions:

(1) All questions are compulsory.

(2) Illustrate your answers with neat sketches wherever necessary.

(3) Figures to the right indicate full marks.

(4) Assume suitable data if necessary.

(5) Preferably, write the answers in sequential order.

(6) Use of non programmable Electronic pocket calculator is permissible.

Q.1) Attempt any THREE of the following. **12 Marks**

i) a) Draw graphical symbols for

1) Brick Masonry 2) Glass

b) Define aspect and prospect in principles of planning.

ii) Draw neat sketches for following lines

1) Section line 2) Hidden Line 3) Construction Line 4) Extension Line

iii) State the importance of the location plan and foundation plan in civil engineering drawing

iv) State the purpose of preparing measured drawings.

Q.2) Draw to suitable scale the line plan of a Hostel building for 100 students. Show different units with their sizes, position of doors and windows. **10 Marks**

Q.3) Attempt the following. **12 Marks**

Fig.no.1 shows a line plan of residential building. Draw developed plan with suitable scale. Show all dimensions and label the parts.

Data-

1. Super structure consists of B.B.Masonry with walls 230 mm thick and internal walls for bath and W.C. 100 mm thick.

2. Assume chajja projection 450 mm thick.
3. Plinth height 600 mm
4. Assume suitable data if necessary.

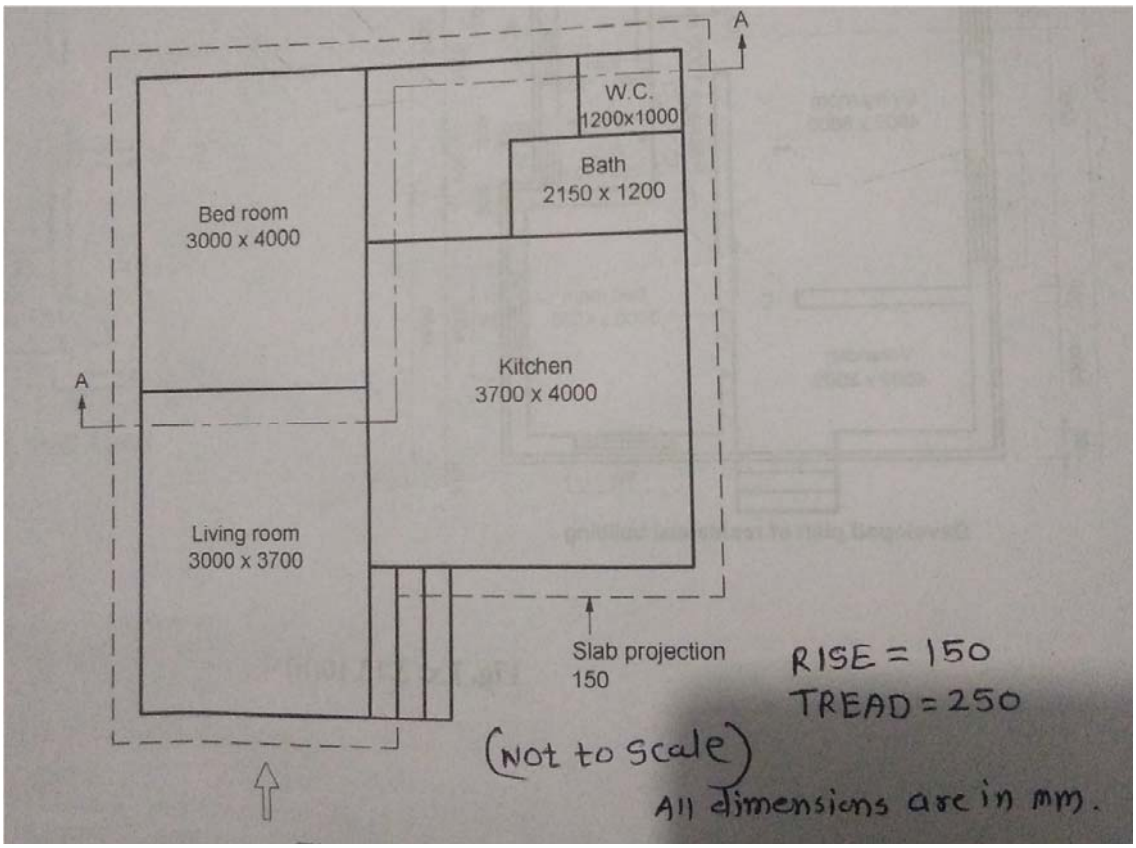

Fig No. 1

Q.4) Attempt any ONE of the following. **12 Marks**

i) Draw detailed plan and section of RCC column and column footing with following data.

1) Size of footing – 1500x1500 mm
2) Size of column – 300 x300 mm

ii) Draw a plan and section of a single flight of a R.C.C. stair case from following data:

Number risers - 10 of 160 mm height.

Number trades -9 of 250 mm width.

Width of stairs case is 1000mm.

Landing at top is 1000×1000mm

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Q.5) Attempt any TWO of the following. **12 Marks**

i) Suggest various units for high school building for 500 students to be constructed in Village.

ii) Define following:

(1) Built up area

(2) Super built up area

(3) Plinth area

iii) Write the purpose of submission drawing and working drawing in civil engineering works

. iv) Draw a neat sketch showing RCC components of lintel with 1:20 scale

Q.6) Attempt the following. 12 Marks

A plan and elevation of simple stair is shown in following fig. no 2. Draw suitable scale the perspective view of it. Retain all construction lines.

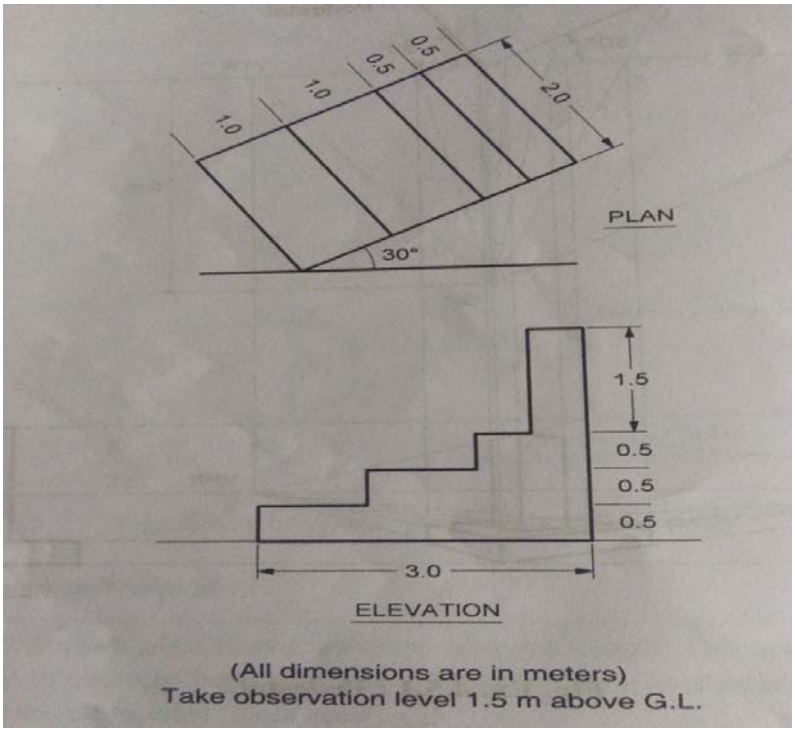

Fig No. 2

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Scheme - I

Sample Test Paper - I

Program Name : **Diploma in Civil Engineering**
Program Code : **CE**
Semester : **Fourth**
Course Title : **Building Planning and Drawing**
Marks : **20**

22405

Time: 1 hour 15 Min.

Instructions:

(1) All questions are compulsory.

(2) Illustrate your answers with neat sketches wherever necessary.

(3) Figures to the right indicate full marks.

(4) Assume suitable data if necessary.

(5) Preferably, write the answers in sequential order.

(6) Use of non programmable Electronic pocket calculator is permissible.

Q.1 Attempt any ONE of the following **03 Marks**

a) Write full form of following abbreviations: i) CCTW ii) RCC iii) MH

b) Draw graphical symbol for: i) Door ii) Wash basin iii) 2 Pin Socket

Q.2 A) Draw a line plan to a suitable scale for single storey bank building. Built up area is Limited to 200 m^2. **08 Marks**

B) Attempt any ONE of the following **03 Marks**

a) State the minimum dimensions for,

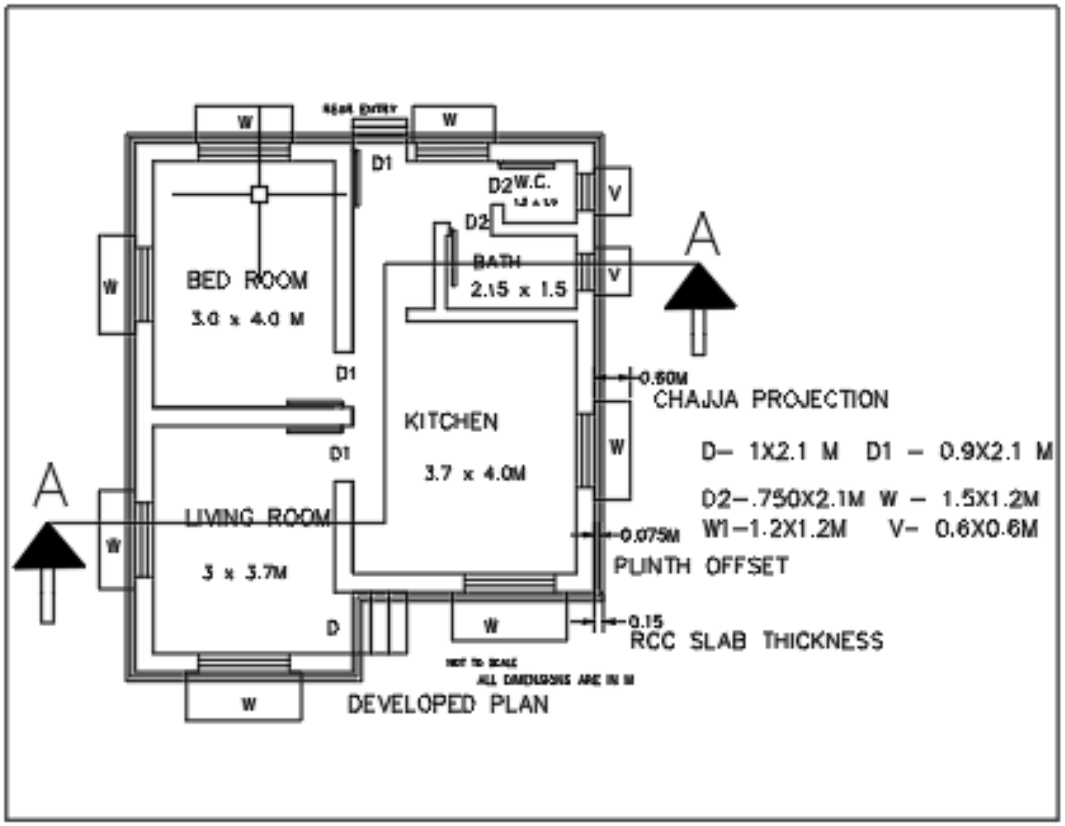
1) Kitchen 2) Garage 3) Bathroom with attached w.c.

b) List out the documents and drawings required for submitting plan to the plan Sanctioning authorities.

Q.3 Following figure shows developed plan of residential building. Details are as follows,

1. R.C.C. Slab (1:2:4) thickness 120mm.
2. Ceiling height is 3000 mm.
3. Plinth height 600 mm.

4. Hard strata is available at 900 mm below ground level.
5. Chajja projection 0.6m.
6. Sill level from plinth is 0.90m.
7. Door – D – 1000X2100 mm , Window – W – 1200X1200mm
8. RCC slab projection 0.150m
9. Super structure consists of B.B.Masonry in CM (1:6) 300mm thick main wall and 100 mm internal wall thickness for W.C.and Bath.
10. Assume suitable data if necessary.



Attempt any one from following. **06 Marks**

a) Elevation

b) Prepare site plan for above plan having plot size 13.5 m × 16.5 m. Road fronting 13.5 m having 9 m width. Also draw north direction.

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'I' Scheme

Sample Test Paper - II

Program Name : **Diploma in Civil Engineering**

Program Code : **CE**

Semester : **Fourth**

Course Title : **Building Planning and Drawing**

22405

Marks : **20** **Time: 1 hour 15 Min.**

Instructions:

(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.
(6)Use of non programmable Electronic pocket calculator is permissible.

Q.1 Attempt the following. **12 Marks**

Fig No.1 Show a line plan of residential building framed structure .Draw Developed plan to a suitable scale or 1:50. Show all Dimensions and label the units.
Provide Chajja Projection -750mm. Rise = 150 mm , Tread=250 mm
Show schedule of openings.

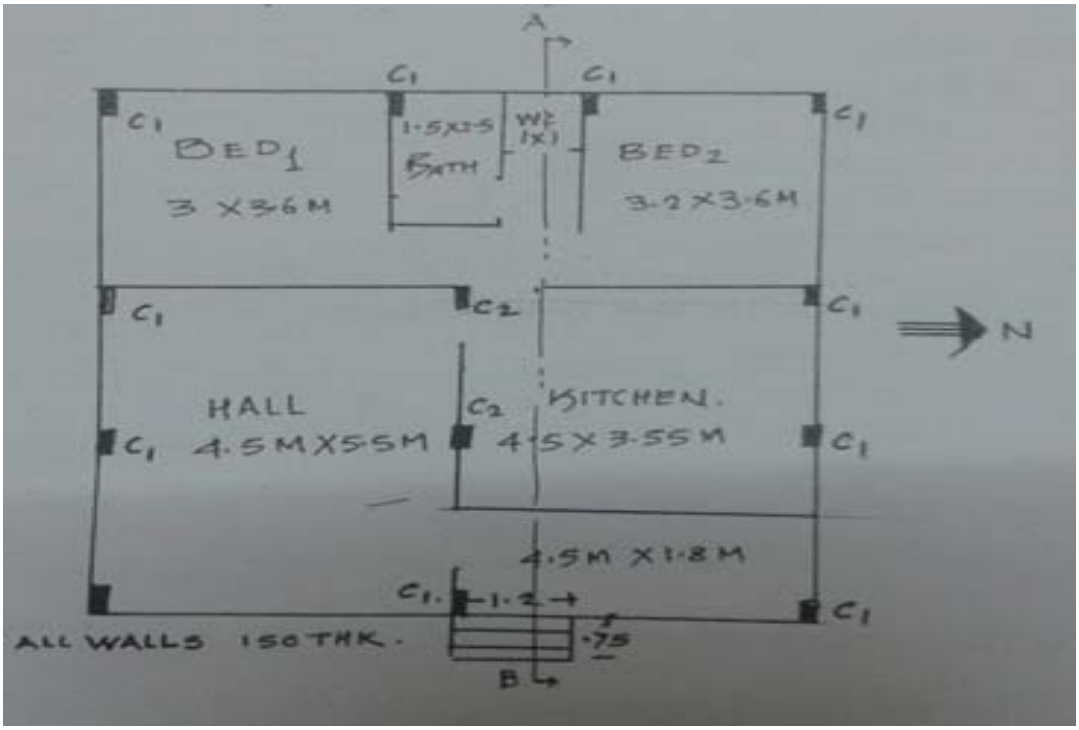

Fig. No- 1

OR

A) Draw detailed section of RCC column footing with following data.

1) Size of footing – 1200x1500 mm
2) Size of column – 230 x400 mm

Assume suitable data if required.

B) Draw a longitudinal section of RCC lintel beam of length1.5m with suitable scale.

Q.2 Attempt the following. **08 Marks**

Draw to the suitable scale two point perspective drawing. Assume eye level at 2.1m above GL.The observer stands at a distance 4.7m along central visual ray. Retain all construction lines. Assume additional data if required. Shown in fig. no 2.

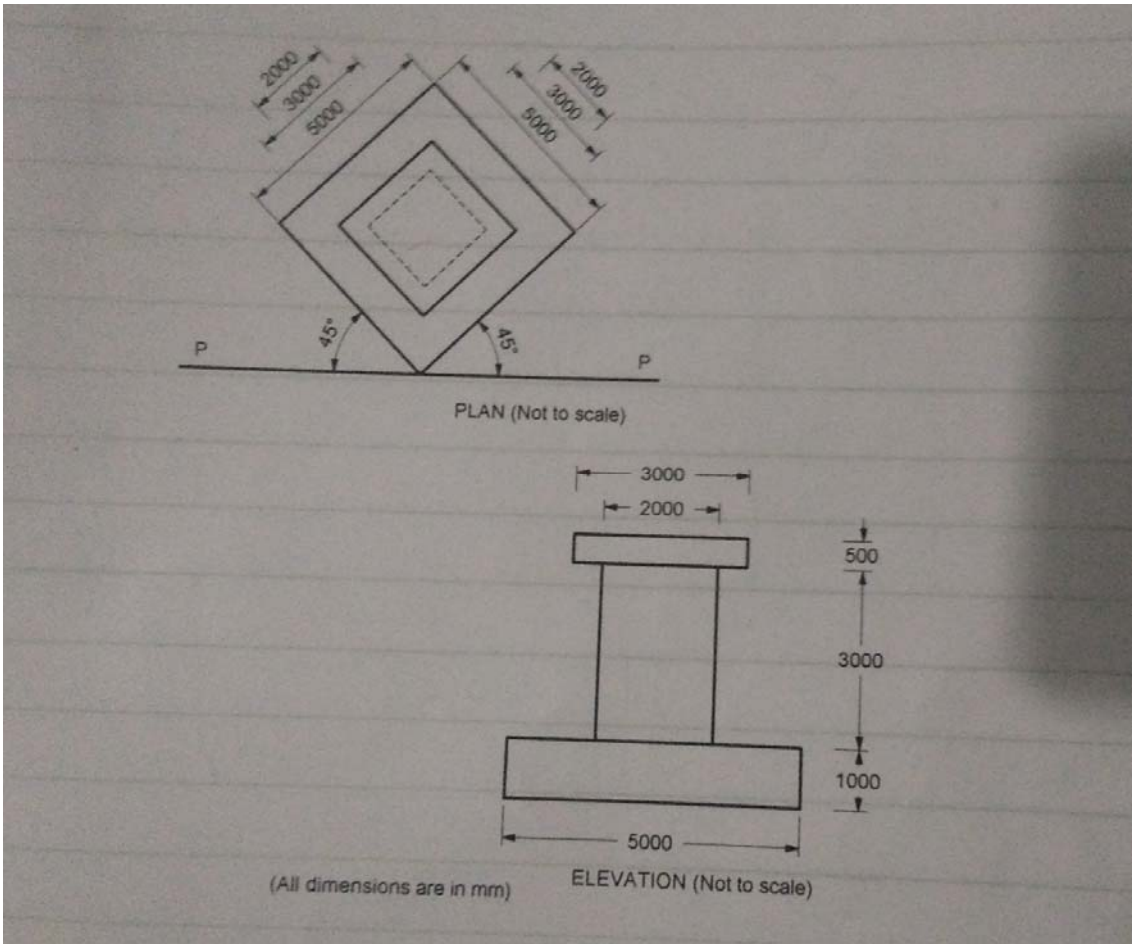

Fig. No 2

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