

6227

BOARD DIPLOMA EXAMINATION, (C-16)

JUNE-2019

DCE - THIRD SEMESTER EXAMINATION

CIVIL ENGINEERING DRAWING - I

Time: 3 Hours

Max. Marks: 60

PART-A

5x4=20M

- Instructions:** 1) Answer all questions.
2) Each question carries Three marks .
3) part-A need not be drawn to a scale.

- 1) Draw the conventional signs for the following:
 - (a) Stone Masonry
 - (b) Wood
 - (c) Concrete
 - (d) Exhaust Fan
- 2) Draw the line diagram of a King-post Truss and label the parts.
- 3) Draw the site plan of a residential building with setbacks to urban area to plot of size 12 m x 22 m.
- 4) Prepare Electric Layout for a single room of 4.0 m x 6.0 m with 300 mm wall thickness.
- 5) Draw the sectional elevations of a lift shaft for multi-storied building.

PART-B

25+15=40

- Instructions:** 1) Answer all questions to a scale.
2) Any missing data may be assumed suitably.

- 6) Draw the following items to a scale of 1:50 for Fig.1
(a) Fully Dimensioned Plan
(b) Section along A-A

Specifications:

(i) Foundation: All the main walls are taken to a depth of 1200mm below ground level and rest on (1:4:8) bed, 1000 mm wide and 300 mm deep. The remaining portion consists of two footings 700 mm and 500 wide and are equal depths, the footings are of R.R. Masonry in CM (1:6).

(ii) Basement: 380 mm wide and 600 mm height, R.R. Masonry in CM (1:6)

(iii) Superstructure: All the walls are 300 mm thick and height 3000 mm in brick masonry CM (1:6)

(iv) Roof: R.C.C. Slab of 100 mm thick.

(v) Lintels and Sunshades: R.C.C. Sunshades are provided over all windows, external doors with 75 mm wide at wall face and 50 mm thick free end. The projection of sunshade beyond the wall surface is 700 mm. R.C.C lintels 200 mm thick provided as all openings.

(vi) Parapet wall: Brick masonry parapet wall in CM (1:6) of 100 mm thick and 750 mm height.

(vii) (a) Door: D1 : 1000x2000 mm ; D2: 800x2000 mm

(b) Windows: W1 : 1200 x 1200 mm; W2 : 1000x1200 mm

(c) Ventilators : V : 600 x 450 mm

(viii) Flooring: Flooring consists of Mosaic tiled flooring over 100 mm thick C.C bed (1:4:8). The remaining part is filled with sand.

(ix) Steps: Rise : 150 mm, Tread: 300mm

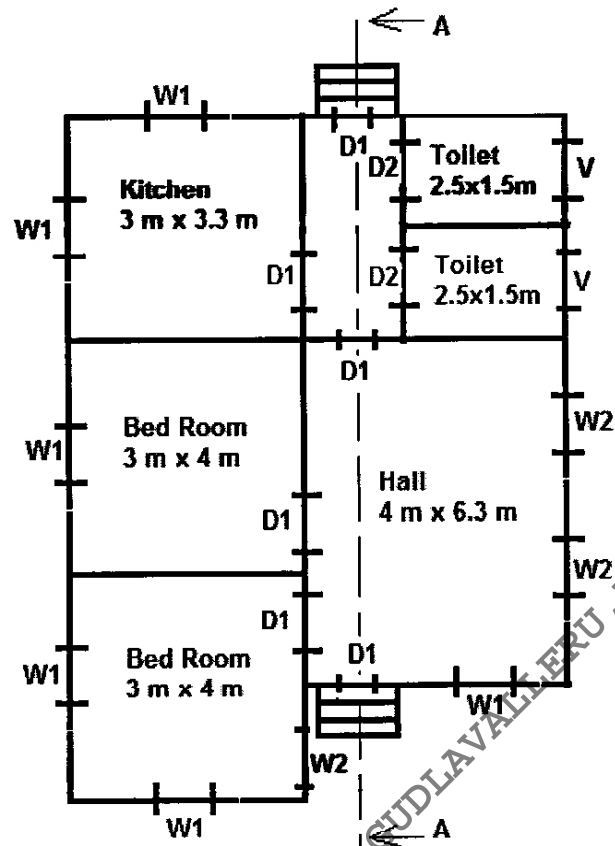


Fig. 1

- 7) Draw the line diagram of a Rural Hospital with requirement for 10 beds capacity to a suitable scale.

* * *