

SIXTH SEMESTER DIPLOMA EXAMINATION IN ARCHITECTURE —  
OCTOBER, 2013

**WORKING DRAWING—III**

[Time : 3 hours

(Maximum marks : 100)

- [Note :— 1. Drawings shall be neat and fully dimensioned.  
2. Missing data may be suitably assumed.  
3. A2 size drawing sheets to be supplied.]

Marks

PART—A

(Maximum marks : 10)

I Answer all questions in one or two sentences. Each question carries 2 marks.

1. What is meant by gypsum board ?
2. Importance of electrical drawing in building construction.
3. Give conventional symbols for the following electrical items :
  - (i) Socket outlet and switch combined.
  - (ii) Bell push.
  - (iii) Exhaust fan.
  - (iv) Buzzer.
4. What are the type of loads expected on a structure ?
5. Function of transverse reinforcement in a column. (5×2=10)

PART—B

(Maximum marks : 30)

II Answer *any three* of the following questions.

1. Draw the sectional details of a vertical cladding on a wall. 10
2. Draw electrical drawing for a class room of size 6m × 6m having Switches, Projector point, Tube lights, Fan etc. 10
3. Draw the L-section of a simply supported doubly reinforced beam from the following data :
 

Size of beam = 300mm × 450mm, clear span = 4.5m.  
Bearing on wall = 200mm, thickness of wall = 300mm.  
Main reinforcement (HYSD) = Tensile - 3 nos. 20mm dia. One bar bent up at 1/7.  
Compressive = 2 bars 16mm dia. Stirrups = 8mm dia. 2 legged @ 200mm/c. 10

4. Draw the sectional elevation of a square column with the following data :

Column = 500mm

Main bars = 4 nos-20mm dia. deformed bars.

Lateral ties = 8mm  $\phi$  @ 300mm c/c mild steel bars.

Footing size = 2.4m  $\times$  2.4m.

Base reinforcement = 10-20mm  $\phi$  both ways.

Thickness of footing at free end = 150mm.

At column face = 500mm.

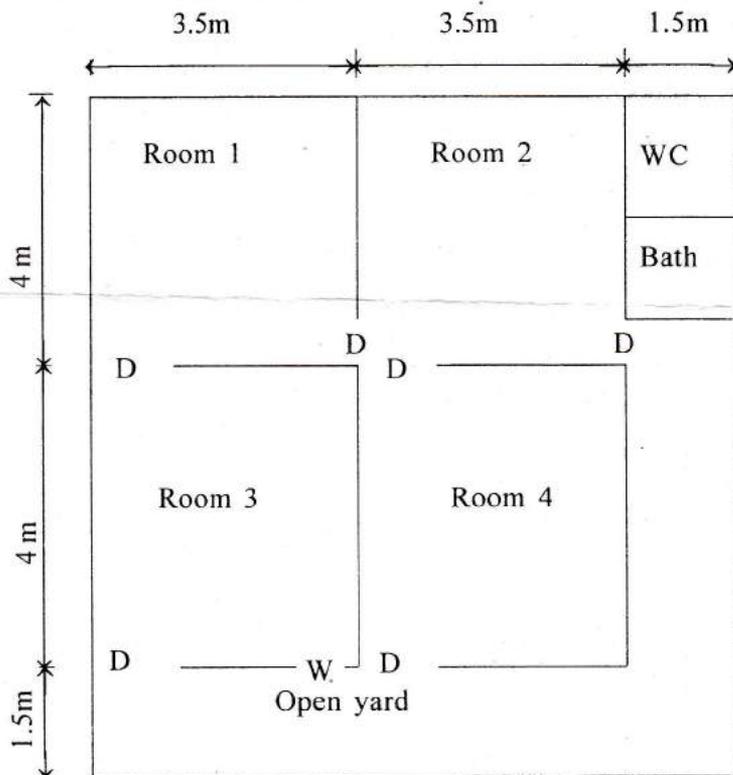
Depth below GL = 800mm.

10

PART—C  
(Maximum marks : 60)

(Answer the following questions. Each question carries 30 marks.)

- III Develop the given plan and draw the electrical fitting layout.



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- IV Draw sectional plan and sectional elevations of a simply supported one way slab with the following data :

Size of room = 3.5m  $\times$  7.5m

Thickness of slab = 150mm

Wall thickness = 300mm

Bearing on wall = 200mm

Reinforcement : Main bars = 12mm  $\phi$  @ 150mm c/c, alternate bars 'bent up'.

Distribution steel = 8mm  $\phi$  bars @ 200mm c/c.

30