



C14-C-407

4429

BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2016

DCE—FOURTH SEMESTER EXAMINATION

BUILDING SERVICES DRAWING

Time : 3 hours]

[Total Marks : 60

PART—A

4×5=20

Instructions : (1) Answer **all** questions.

(2) Each question carries **four** marks.

1. Draw the plan of a water supply pipe network diagram for a toilet.
2. Draw the cross-section of standard rain water harvesting pit for a residential building.
3. Draw the wiring diagram connections to 3-phase motors.
4. Draw the electrical layout in kitchen and label parts.
5. Draw the plan for ducting an air conditioning system for a bed room.

PART—B

20×2=40

Instructions : (1) Answer **all** questions.

(2) Each question carries **twenty** marks.

6. Draw the plan and longitudinal section of a septic tank to a scale of 1 : 20 for the given specifications :

Internal size = 800 mm × 2400 mm

Brick masonry wall thickness = 230 mm

*

Thickness of CC bed = 600 mm

CC offset for masonry walls = 300 mm

Depth of water = 900 mm

Free board = 300 mm

RCC roof panels = 100 mm thick and 400 mm wide fitted with bent handles for lifting

Scum board = RCC precast slab 75 mm thick fixed at a height of 300 mm from floor level and extending up to a height of 150 mm below roof. This shall be fixed at a distance of 800 mm from inside of wall at inflow end into a groove of 75 mm deep.

Baffle wall = RCC precast slab 75 mm thick kept on floor at a distance of 600 mm from inside of wall at outflow end. The top of baffle shall be 150 mm below water level.

Inflow and outlet pipe = 100 mm dia. Tee shaped pipes.

Vent pipe = 50 mm dia. AC pipe with a cowl extending to a height of 2.0 m above GL.

Masonry pedestal = 450 mm dia. circular brick masonry pedestal shall be provided around the vent pipe up to GL.

7. Draw the typical layout of a lift well and motor with lift machine accessories.
