

Roll No.: 178230044

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EG-294

**B.E. III Semester (CGPA) Civil Engg.
Examination 2018**

BUILDING DESIGN AND DRAWING

Paper - CE-306

Time Allowed : Three Hours]

[Maximum Marks : 60

Note : Attempt all questions. All questions carry equal marks.

Q.1. a) Define foundations and mention their objects.

6

b) Give sketches of

6

i) Grillage foundation

ii) Stepped foundation

(2)

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OR

Design a proper layout of an R.C.C. stair for a hospital consists of ground floor and first floor from the following data: 12

Inside dimensions of stair case 6.00m × 4.50m

Height of each floor 3.75m

Thickness of floor slab 150mm

Height of stair cabin 2.50m

Width of stair 1.50m

Show plan and section

Q.2. a) Write short notes on 6

i) Economy

ii) Sanitation

iii) Privacy

b) Write General rules and design guidelines for natural ventilation according to BIS3362. 6

OR

(3)

- c) Write short notes on: 6
- i) Artificial ventilation
 - ii) General principles of window design for good day light (IS:2440)
- d) What do you mean by Elegance and Roominess? 6

- Q.3. a) Discuss various types of stairs used in building. 6
- b) Write short notes on 6
- i) Gully trap
 - ii) Wash basin
 - iii) Stop valves

OR

- c) Enumerate the requirements of good acoustical material. 6
- d) Define thermal conductivity and thermal resistance. 6

(4)

- Q.4. a) Write various types of doors sketch any two. 6
b) Write various types of windows sketch any two. 6

OR

Plan and draw a detailed layout diagram for clinic in rural area. 12

- Q.5. a) What do you mean by energy efficient building. 6
b) Discuss one point perspective. 6

OR

Write short notes on: 4×3=12

- i) Parallel and oblique perspective
- ii) Station point and vanishing point
- iii) Picture plane
- iv) Measuring points

