

B.E. (IIIrd Sem.) (CGPA) Civil Engg. Exam-2015**BUILDING DESIGN & DRAWING****Paper - CE-306****Time Allowed : Three Hours****Maximum Marks : 60****Note :** All questions are compulsory.**Unit-I**

- Q.I** Draw the elevation, section and plan of a fully panelled door of a residential building 2.1 m high and 1.2m wide. **12**

Or

- A stair case is to be provided between two floors of a residential building. The stair hall measures 4 m x 2.4m. Height from floor to floor is 3.5 m. Draw plan and section. **12**

Unit-II

- Q.II** Write short notes on the following— **12**
- (a) Floor Area Ratio
 - (b) Setbacks
 - (c) Open Area
 - (d) Building Bye-laws

(2)

UITians

Or

- (a) What are the salient features of National Building Code (NBC) for residential building.
- (b) Explain various principles of architectural composition. 6

Unit-III

- Q.III (a) What are the factors affecting proper ventilation and lighting in any residential building? 6
- (b) What are the different types of building services? Explain in brief. 6

Or

- (a) What is stair? Explain different types of stairs. 6
- (b) What is acoustic of building? Why it is required? 6

Unit-IV

- Q.IV Draw a suitable plan, elevation and section with full details of a primary health centre. 12

Or

- Draw a suitable plan, elevation and section with full details of a residential building suitable for middle income group. 12

(3)

Unit-V

UITians

Q.V (a) How you can make a building energy efficient? Explain. 6

(b) Explain the terms—

- (i) Station point
- (ii) Vanishing point
- (iii) Ground line

Or

(a) A rectangular prism $30 \text{ cm} \times 3 \text{ cm} \times 2 \text{ cm}$ laying on one of the faces marks an angle of 30° with the plane. An observer is standing 8 cm in front of the picture plane and the height of the observer is 6 cm. Draw perspective view of the prism. 6

(b) What is perspective drawing'? Explain one point and two point perspective.