

Total No. of Questions : 5

Total No. of Printed Pa

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**EK-325**

**B.E. (Illrd Sem.) (CGPA) Civil Engg. Examination-2016**

**BUILDING DESIGN & DRAWING**

**Paper - CE - 306**

***Time Allowed : Three Hours***

***Maximum Marks : 60***

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

**UNIT-I**

**Q.1** What are the functions of lintels & arches?

- (a) Draw the sectional elevation and plan of lintel with 600 mm wide chajja projection. 5
- (b) Draw the plan, elevation and section of one third panelled and two third glazed door (wooden) with chaukhat and fixtures to a suitable scale for opening size 1-2 m wide and 2.1 m high. 7

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OR

An open well stair case is to be provided in a stair well measuring 6m x 4.5m for a public building. Floor to Floor height is 3.75 m. Plan & Draw the details of staircase to a suitable scale. 12

### UNIT-II

Q.II (a) Write short notes on : 2x3=6

(i) Elegance

(ii) Privacy

(iii) Roominess

(b) Show by drawing sketch how the positioning of door and window affect the internal privacy? 6

OR

(a) Explain the importance of Building Bye laws. 6

(b) Explain the following terms : 2x3=6

(i) FAR

(ii) MOS

(iii) BUA



**UNIT-III**

- Q.III (a) What are the various fire safety measures which should be incorporated during planning of building. 6
- (b) Explain the "one and two pipe system" of sanitation with neat sketch. 6

OR

Write brief notes as per National Building Code provisions on building services of : 4x3=12

- (a) Ventilation
- (b) Electrification
- (c) Acoustics of Building
- (d) Thermal Insulation of building

**UNIT-IV**

- Q.IV Draw the detail plan for a residential building suitable for middle income group. Draw sectional elevation also. Assume data suitably.

OR



( 4 )

Design a primary school building and draw its plan to scale & give schedule of joinery i.e. door & windows opening & types also. 12

### UNIT-V

- Q.V (a) Describe rules for drawing perspective view. 6
- (b) What is energy efficient building? 6

OR

Draw the parallel perspective of rectangular prism 40mm x 30 mm x 20 mm, lying on one of its rectangular faces on horizontal plane with one of the vertical face making an angle  $45^\circ$  with vertical plane. The picture plane is at a distance of 25 mm from the nearest corner of the object. The station point is at a distance of 60 mm above horizontal plane. 12