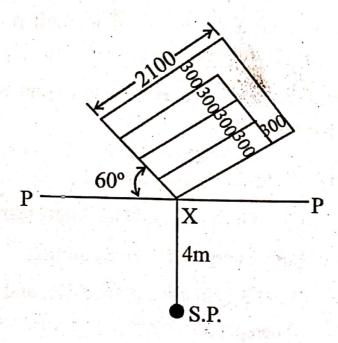
| 4.   | hor        | Roll No                                     | •••                |  |  |  |
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|  |            | EGS-294                                     |                    |  |  |  |
| B.E. 3rd Semester (CGPA) Civil Engg. (Zero Sem.) Examination–2018 BUILDING DESIGN AND DRAWING Paper–CE–306 |            |   |                    |  |  |  |
| Tim  | ne:3 F     | Iours] [Maximum Marks: 6                    | [Maximum Marks: 60 |  |  |  |
| Not  | te: -      | Attempt all questions.                      |                    |  |  |  |
|  | 144        | All questions carry equal marks.            | , ·                |  |  |  |
| 1.   | (a)        | How would you provide foundations on        | a                  |  |  |  |
|  |            | black cotton soil Explain with sketch.      | 6                  |  |  |  |
|  | (b)        | Differentiate between the following:        | 6                  |  |  |  |
|  | 3          | (i) Combined footing and continuous footing | IS                 |  |  |  |
|  |            | (ii) Shallow foundation and dee foundation. | p                  |  |  |  |
| Sept.  | taj Alii 4 | or  |                    |  |  |  |
|  | (a)        | What are the requirements of good stair?    | 6                  |  |  |  |
| EC   | S-29       | 4 (1) Turn Ov                               | er                 |  |  |  |
|  |            |   |                    |  |  |  |

|               | (b)   | Design and draw layout of staircase to            | be  |  |  |  |
|---------------|-------|---|-----|--|--|--|
|               |       | built between two floors 3.00 m apart. Si         | ze  |  |  |  |
|               |       | of staircase is 3 m × 5 m. Draw a dimension       | al  |  |  |  |
| . ·           |       | plan and sections.                                | 6   |  |  |  |
| 2.            | (a)   | What are the principles of planning?              | 6   |  |  |  |
|               | (b)   | Write short notes on:                             | 6   |  |  |  |
|               |       | (i) D.P.C. (ii) Mezzanine floor (iii) F.A.R.      | 1   |  |  |  |
|               |       | or  |     |  |  |  |
|               | Writ  | te Imporant regulations according to IS:125       | 56  |  |  |  |
|               | buil  | building bylaws to provide model planning for the |     |  |  |  |
| ø.            |       | ncipalities having population between 50,00       | )0  |  |  |  |
|               | to 2  | ,00,000.  | 2   |  |  |  |
| 3.            | (a)   | What are the characteristics of an ideal fi       | re  |  |  |  |
| ul<br>, · · · |       | resisting material?                               | 6   |  |  |  |
|               | (b)   | Enumerate the requirements of good                | od  |  |  |  |
| 14.0          |       | acoustical material?                              | 6   |  |  |  |
|               | n, la | or or   |     |  |  |  |
|               | (a)   | Write short notes on:                             | 6 - |  |  |  |
|               |       | (i) Water closet (ii) Floor trap (iii) Manho      | ole |  |  |  |
|               | (b)   | Why is ventilation required?                      | 6   |  |  |  |
| EC            | S-29  | (2)   |     |  |  |  |
|               |       |   |     |  |  |  |

| 4.        | (a) Write various types of windows, sketch any two.  |  |  |  |  |
|-----------|--|--|--|--|--|
|           | (b) Explain English bond and flemish bond with the help of neat sketches.  |  |  |  |  |
|           | Or  Draw plan and section of a small residential building consists of two rooms with front Verandah and attached latrine (assume all data suitably).  12   |  |  |  |  |
| <b>5.</b> | <ul> <li>(a) Write short notes on:</li> <li>(i) One point and two point perspective</li> <li>(ii) Energy efficient building</li> <li>(b) What is vanishing point (V.P.) and purpose of perspective?</li> </ul> |  |  |  |  |
|           | or  Following sketch shows a plan of step blocks shorted side of the step block is inclined at an angle 60° to the picture plane and touches the same point  |  |  |  |  |
| EG        | S-294 (3) Turn Ove   |  |  |  |  |

'X', the observer is at a distance of 4 m from 'X'. Assuming eye level at 1.5 m above G.L. Draw the perspective view of step block. Retain all rays.



Fig

**EGS-294** 

(4)