

SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (REGULAR), NOVEMBER-2015

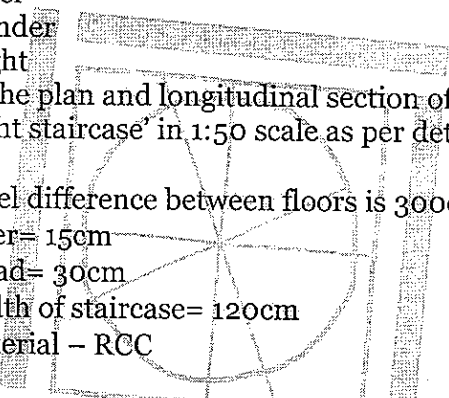
B. ARCH, II YEAR, III SEMESTER

BC-3: BUILDING CONSTRUCTION

Time – 3.00 Hours

Maximum Marks - 100

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- a) Answer any Four questions out of 1 to 7 questions.  
b) Question No. 8 is compulsory and answer any four out of six sub-questions.  
c) Use neat sketches for explaining.
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- Q1. (i) Explain in short with sketches (3x2=6M)  
(a) Riser  
(b) Winder  
(c) Flight
- (ii) Draw the plan and longitudinal section of a 'straight staircase' in 1:50 scale as per details below (14M)
- Level difference between floors is 300cm
  - Riser= 15cm
  - Tread= 30cm
  - Width of staircase= 120cm
  - Material – RCC
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- Q2. (i) Explain the difference between RCC and PCC (5M)  
(ii) Draw detailed plans and section of a column and its footing in 1:10 scale as per details below. (15M)
- Column size = 25 x 25 cm
  - Column footing = 120 x 120 cm
  - $D = d_1 + d_2$ ;  $d_1 = 25$  cm  $d_2 = 35$  cm
  - Reinforcement bars for column – 4<sub>nos</sub>, 12mm dia
  - Stirrups for column-8mm dia @15cm c/c
  - reinforcement mat for footing-10mm dia @15cm c/c both ways.