SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (REGULAR) APRIL – MAY - 2017

B. ARCH III YEAR VI SEMESTER

BUILDING MANAGEMENT (BM-6)
(QUANTITIES AND ESTIMATIONS)

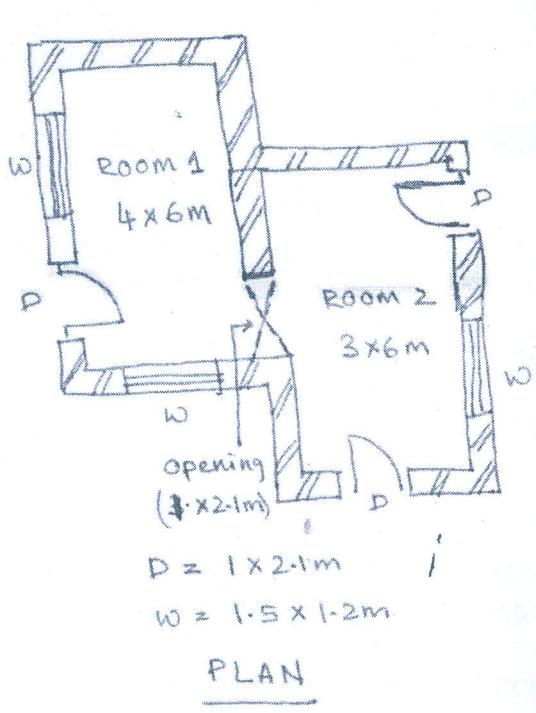
Maximum Marks – 60 **Time – 2 ½ Hour**

a) Answer any Two questions out of 1to 4 questions.
b) Question No.5 is compulsory and answer any four out of six sub-questions.

Q1. Explain the various methods of taking out quantities. List the difference between centre line method and long wall-short wall method of taking out measurements. **(10+10)**

Q2. Calculate the detailed, estimate for the double roomed building (Load bearing type structure by Centre Line Method for the following items:(Refer Fig.1) **(20M)**

a. Earth work excavation
b. Cement concrete (1:4:8)
c. Brick masonry of standard size in C.M(1:8)
d. RCC (1:2:4) for lintels
e. RCC (1:2:4) for slabs
f. Cement concrete (1:5:10) for flooring
g. Plastering to all exposed surfaces of brick work and basement with C.M(1:5)
h. White washing with best shell lime
i. Flooring with spartek tiles set in C.M(1:3)



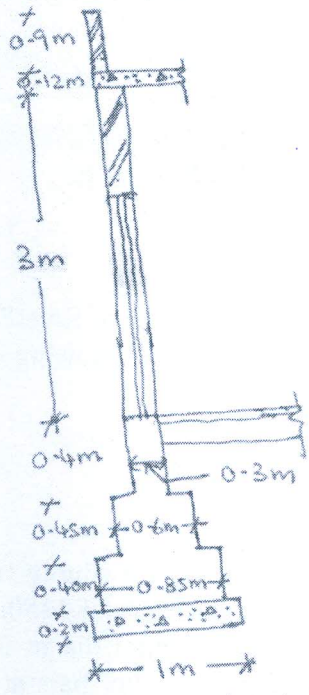


FIG-1

Q3. Provide a detailed estimate of RCC Beam (Refer Fig-2). Prepare a Bar bending schedule. **(10+10)**

Clear Top and Bottom cover – 25mm
Clear cover Ends/sides – 25mm
Weight of steel/m: 6mm dia – 0.22kg/m
12mm dia – 0.89kg/m
16mm dia – 1.58 kg/m

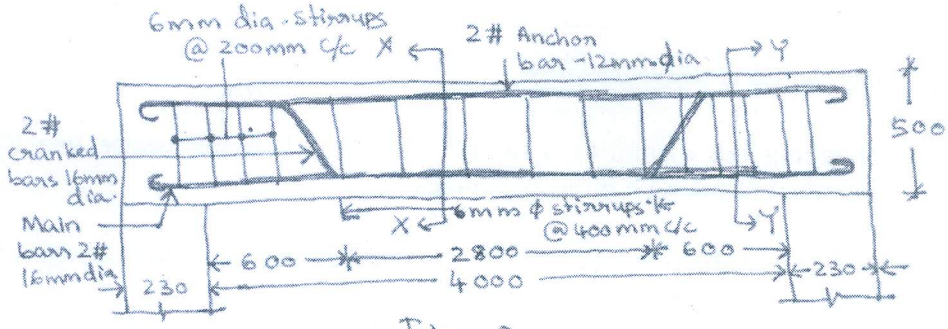


Fig – 2.

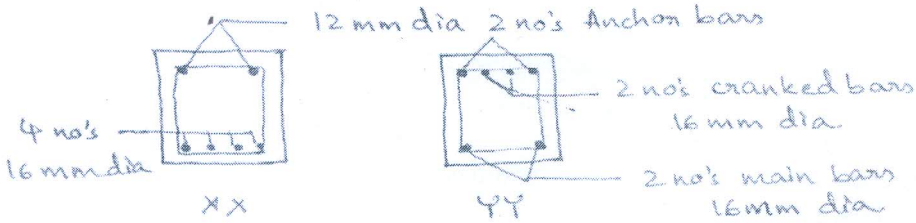
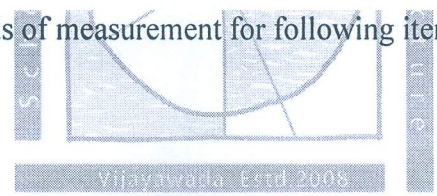


Fig - 2

Q4. Write in detail rules and methods of measurement for following items: **(8+6+6)**

a. RCC Work
b. Plastering
c. Carpentry



Q5. Write short notes on any FOUR of the following: **(4x5= 20M)**

i) Define Bill of Quantities
ii) Define Building Cost Index
iii) What do you understand by Schedule of Rates?
iv) Mention the units for measuring the following items
   a) Flooring
   b) DPC
   c) Nosing
   d) Brick Masonry
   e) Plastering
v) Prepare a bar bending schedule of a simply supported RCC. lintel of size 300mm wide and 200mm depth, with a clear span of 1150mm and bearing of 150mm on either side. Main bars in tension zone of 16mm dia in 3 no's, one bar is cranked through 450 at 170mm from each end. 2 no's anchor bars at top of 8 mm dia, Two legged stirrups @ 150mm c/c of 6mm dia.
vi) Prepare an approximate estimate of building project with a total plinth area of 800 Sq.m at rate of Rs.4500 per Sq.m. Determine total cost of building project. (Write your assumptions taken).

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