

09ARC6.6

USN

Sixth Semester B. Arch. Degree Examination, Dec.2017/Jan.2018 Estimation and Costing

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FOUR questions from question 2 to 7.

2. Question ONE is compulsory.

3. Missing data, if any, may be suitable assumed.

- The accompanying Fig.Q1. Shows the details of three room small residential unit. Prepare detailed estimate for below mentioned items or works by "CENTRE LINE METHOD".
 - a. Centre line calculation and number of junctions.

(08 Marks)

b. Earthwork excavation for foundation.

(08 Marks)

c. PCC 1:3:6 bed concrete for foundation.

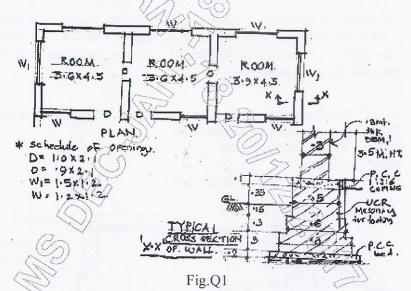
(04 Marks)

d. UCR masonry for footing/foundation in cm 1:6

(10 Marks)

e. 3 mt thk. BBM for super structure.

(10 Marks)



- Write detailed technical specification for following items:
 - a. What is specification? What is special specification?
 - b. Providing and constructing. BBM for super structure in cm 1:4.
 - c. Providing and laying plastering to internal walls in cm 1:6.

(15 Marks)

- Form the 1st principles arrive at the rate for below mentioned items of works.
 - a. Providing and constructing PCC 1:3:6 for foundation bed b. Providing constructing BBM for super structure in cm 1:6
 - c. Providing and constructing 20 mm thk external plaster in cm 1: 4.

(15 Marks)



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- 4 Explain briefly:
 - a. Explain briefly the types of estimate.
 - b. Annual repair maintenance, annual maintenance AB and AM.

(10 Marks)

(05 Marks)

- 5 a. The steel quality is to be computed diameter wise from following data
 - b. Size of column footing 1.5×1.5 m in plan

Steel provided for footing − 10mm T 15cm c/c both ways

Cross section of column – 30cm × 30m

Main reinforcement of column -4-20mm $\Re 4-16$ mm \Re

Ties 8mm \ @ 10 cm c/o

Height of column - 5mt

Weight of 8mm – 4kg/mt

10mm - 6 kg/mt/

16mm - 1.6 kg/mt

20mm - 2.5 kg/mt.

(15 Marks)

- Calculate the quantity of earth work for 400mt length for a portion of road in a uniform ground the height of bank at two ends begin 7 and 1.4. The formation width is 7.0mt and side slope 2:1 (horizontal to vertical). Assume that there is no transverse slope. Calculate the quantity using method -I.
- Fig.Q7 shows that details of septic tank prepare the estimate for following items of work.
 - a. Earthwork excavation for septic tank
 - b. PCC 1:3:6 for bed concrete
 - c. BBM for wall in cm 1:4
 - d. RCC 1:1.5:3 for slab for septic tank.

(15 Marks)

