

## EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2010

## CE.04.801 – Quantity Surveying and Valuation

Answer ALL questions

Schedule of rate of Kerala P.W.D. and Standard Data book of Kerala P.W.D. are permitted

TIME: 3 Hours

Maximum: 100 Marks

- (8 x 5 = 40)
- 1 (a) Enumerate different types of estimates used in Civil Engineering works?
- (b) Distinguish between centre line method and long/short wall methods of estimation.
- (c) Why specifications for building materials and construction?
- (d) How you will estimate earth work for irrigation canals?
- (e) How do you prepare a conveyance statement?
- (f) Prepare a bar bending schedule for a cantilever R.C.C. beam.
- (g) Why valuation of property?
- (h) Distinguish between sinking fund and depreciation.
- 2 (a) From the plan and section given in Figure 1, estimate the quantities of the following items of work: (30)
- i. Earth work
  - ii. Brick work in CM 1:6 for superstructure
  - iii. R.C.C. (M20) for lintel and roof slab
- (OR)
- (b) From the plan and section given in Figure 1, estimate the quantities of the following items of work: (30)
- i) Random Rubble masonry work in CM 1:8 for foundation and basement
  - ii) Plastering in CM 1:4 for walls
  - iii) Plastering in CM 1:3 for roof bottom and sunshade
- 3 (a) Prepare abstract and detailed estimate of doors and windows for the building given in Figure 1. (10)

(OR)

- (b) Write down the detailed specification for the following items: (10)
- i) R.C.C. columns with M20 concrete and Fe415 steel
  - ii) First class brick work for superstructure

- 4 (a) i) From first principle, analyze the rate per unit based on your local rates for R.C.C. work for beams in ground floor. (10)
- ii) Prepare a bar bending schedule for a typical R.C.C. one way slab

(OR)

- (b) i) From first principle, analyze the rate per unit based on your local rates for Brick masonry in cm 1:6 in first floor. (10)
- ii) Prepare a bar bending schedule for a typical isolated R.C.C. column footing.

- 5 (a) An old building has been purchased at a cost of Rs. 8,00,000 excluding the cost of land. Determine the amount of annual sinking fund at 7 percent interest, assuming the future life of the building as 20 years and the scrap value of the building as 10 percent of the cost of purchase (10)

(OR)

- (b) Compare various methods of determining value of property. (10)

Figure 1

