



DU – 039

VIII Semester B.E. (Civil) Degree Examination, December 2017/January 2018
(2K11) (Semester Scheme)
CE-802 : ESTIMATION, SPECIFICATION AND COSTING

Time : 4 Hours

Max. Marks : 100

- Instructions:** i) Answer **four full** questions, selecting **one** question from Part – **A** and **three** questions from Part – **B**.
ii) Assume suitable data, **if necessary**.

PART – A

1. Prepare a detailed estimate with abstract for a septic tank with soak pit for the following items only (Ref. Fig. No.1) **40**
- Earth work excavation in Hard Soil
 - Foundation Bed Concrete in CC 1 : 4 : 8
 - Brick work quantity for soak pit and septic tank
 - RCC quantity for slab (soak pit and septic tank)
 - Steel quantity and fabrication charges
 - Plastering in CM 1 : 3
 - Provision of MH cover and Iron steps.
2. The accompanying sketch (Fig. No. 2) is that of a single bed room residential building. Prepare a detailed estimate for the below mentioned items only by center line method, assuming the current rates prevailing in your area locality. **40**
- Earth work excavation in hard gravelly soil for foundation.
 - The foundation bed is of C.C. (1 : 4 : 8)
 - Size stone masonry in C. M. (1 : 6) for foundation and basement
 - Burnt brick masonry in C. M. (1 : 6) for super structure parapet.
 - Vitrified Tiles flooring

P.T.O.



PART – B

3. Calculate the quantity of wood required for preparing a paneled wooden door size of 1m × 2.1 m. **20**
- Frame – 65 mm × 125 mm
 Styles – 100 mm × 30 mm
 Top rail – 100 mm × 30 mm
 Bottom Rail – 100 mm × 30 mm
 Middle Rail – 150 mm × 30 mm
 Panels – 25 mm thick
4. Work out the quantity of materials and prepare a detailed estimate for a length of 1 km. PQC (M-30 Grade) road of 7 m wide and soling coat and intercoat layer of 15 cm thick each (Assume New CC Road Construction). **20**
5. Work out from first principles, the unit rates for the following considering the prevailing market rates : **20**
- CC 1 : 4 : 8 using 40 mm down size aggregates for foundation bed.
 - BBM in CM 1 : 6 for super structure.
 - Mangalore tile roofing.
6. The R.L. of ground along the centerline of a proposed road from 200 to 500 m are given below. R.L. of formation @ 200 m Chainage is 107.00 and the road is downward gradient of 1 in 150 upto 320 m and then gradient changes to 1 in 100. Formation width of road is 10.0 m, side slope of banking are 2 : 1, prepare an estimation for earth work quantity. **20**

Chainage	200	230	260	290	320	350	380	410	440	470	500
RL of Ground	105.0	105.6	105.44	105.90	105.42	104.30	105.0	104.10	104.62	104.0	103.3
RL of Formation Level	107.0	Downward Gradient _____									

7. Write short notes : **20**
- Schedule of Rates
 - Materials at site account
 - Lead and Lift
 - EMD and SD.

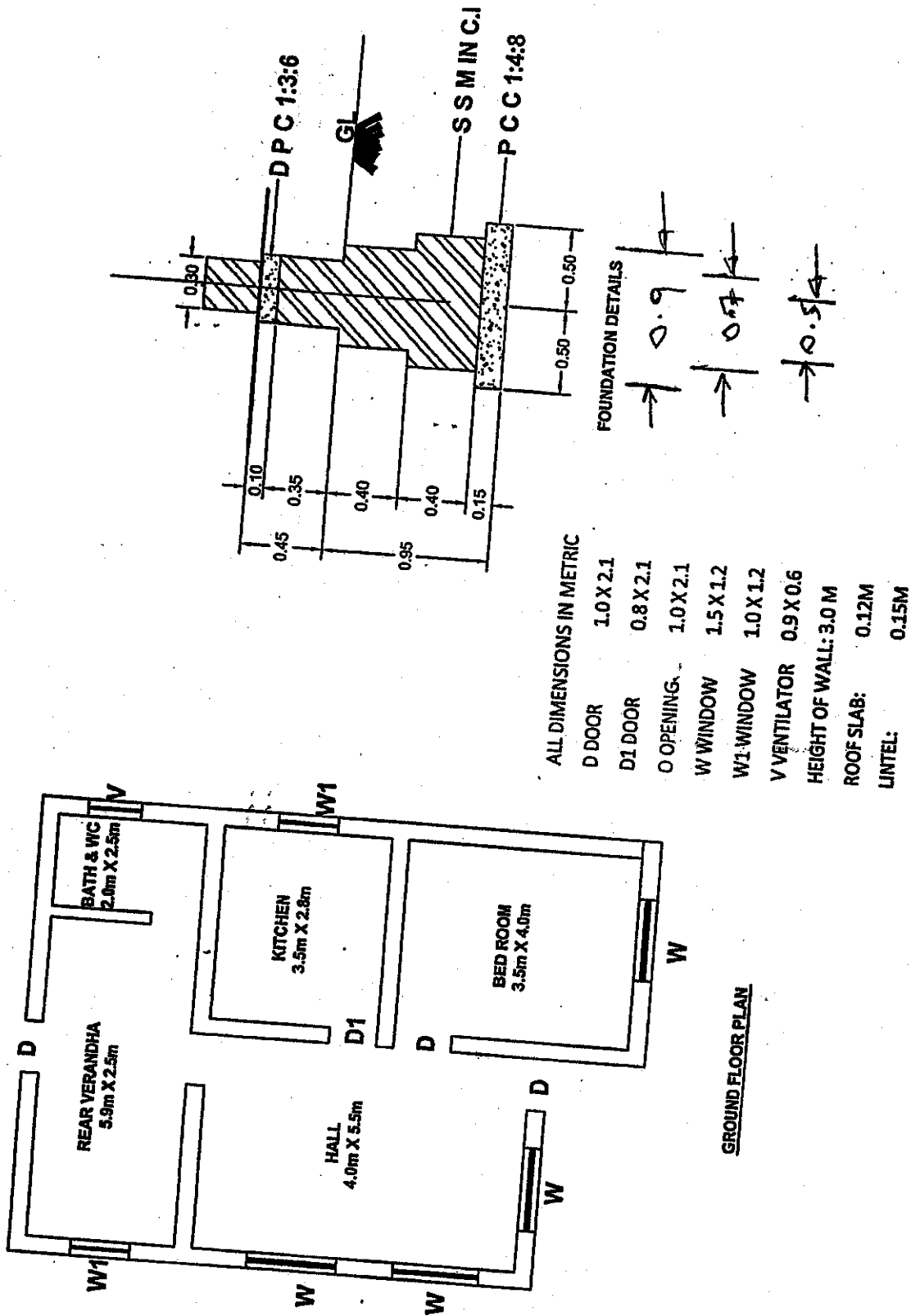


Fig. No.2