

B.E. Civil Engineering (CBCS Pattern) Sem-VIII
CE801 - Quantity Surveying and Estimation

Time : Four Hours

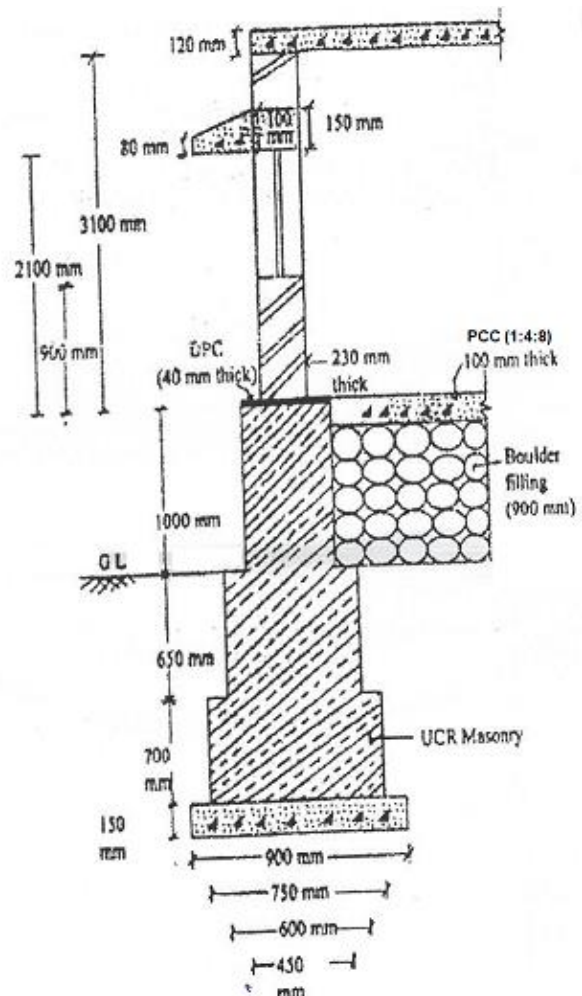
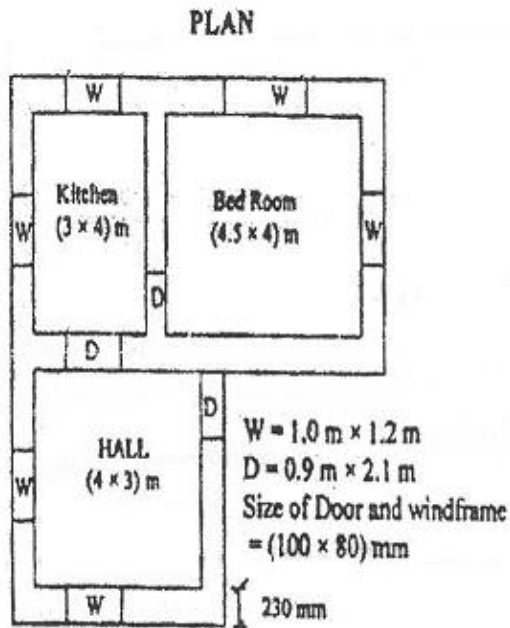


GUG/W/22/13587

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
 2. Question No. **one** is compulsory.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and Chemical equation should be given wherever necessary.
 6. Retain the construction lines.
 7. Illustrate your answers wherever necessary with the help of neat sketches.

- 1.** Work out the quantities of the following items & enter in the standard measurement sheet with brief description of the item. **16**
- i) Excavation for foundation trenches.
 - ii) Plane cement concrete (1:4:8) 100 mm thick on the plinth level.
 - iii) Internal plaster to wall surface.



2. a) Explain the various types of estimates with suitable example. 8
- b) Describe the mode measurement for painting works of doors & windows. 8

OR

3. a) Calculate the volume of earthwork in a road embankment with following details. 8
- Formation width = 10.0 m
 - Slid slope in filling = 2:1 & in cutting = 1.5:1
 - One chain length = 30.0 m
 - Transverse slope = 1 in 40

Distance (m)	G. L. (m)	F. L. (m)
0	136.00	135.20
30	135.00	135.40
60	135.60	135.60
90	135.80	135.80
120	136.00	136.00
150	136.20	136.20
180	136.40	136.40

- b) State the method for calculating the earthwork for a road embankment & road cutting. 8

4. a) What is 'breach of contracts'? Explain in details. 8
- b) Prepare a suitable tender notice to invite tender for the construction of civil Engg. Dept. building for G. U. G. costing 1,00,00,000/- 8

OR

5. a) Explain in details essential requirement of good specification. 8
- b) Write a detailed specification of the following items **any two**. 8
- Second class brick masonry in CM 1:6 in superstructure.
 - 12 mm thick cement plaster in cement mortar in proportion.
 - Oil painting to wall surfaces

6. a) Write short note on 'Direct & Indirect charges'. 8
- b) What do you understand by Task work of labourer? Explain the factors affecting task work. 8

OR

7. a) Define rate analysis. Explain in detail the major & Minor factors affecting the rate analysis. 8
- b) Give the rate analysis of the following items any two. 8
- 12 mm thick cement plaster in cement mortar in proportion.
 - Laying PCC 1:4:8 mix in foundation.
 - RCC (1:2:4) with 2% steel in beam.

8. a) Define & explain in detail Time-cost relationship. 8
- b) Name the methods of depreciation & explain any two. 8

OR

9. a) Write short note on sinking fund. 6
- b) In a plot of land costing Rs. 1 lakh building has been newly constructed at a total cost of Rs. 5 lakh including sanitary & water supply work. The building consists of two flats for tenants. The owner expects 9% return on cost of construction & 5% return on cost of land. Calculate standard rent for each flat of following.: 10
- Assume:
- Future life of building = 70 years
 - Annual repairs cost at 1.5% of cost of construction.
 - Rate of interest for sinking fund = 9%
 - Other outgoing including taxes to be 40% of gross income.
