

Exam No:

GANPAT UNIVERSITY

B. Tech.(Civil) Sem.-VI CBCS Regular Examination – April/June : 2017

2CI604 Estimating & Costing

Max. Time: 3 Hours

Total Marks: 60

- Instructions: (1) This Question paper has two sections. Attempt each section in separate answer book.
(2) Figures on right indicate marks.
(3) Be precise and to the point in answering the descriptive questions.
(4) Assume standard dimensions and rates wherever required.

Section – I

- Q.1 (A) What are the essential qualities that are required to be a good estimator? (05)
(B) Write down points to be observed while preparing measurement book. (05)

OR

- Q.1 (A) Write down deduction criteria for calculating the quantity of plaster work. (05)
(B) Discuss the major aspects of any construction project and how that aspects are affected. (05)
Q.2 (A) Write detailed Specifications for (1) Earth work in excavation in foundation.(2) (06)
Cement concrete 1: 2: 4
(B) Workout rate analysis for 'Cement Concrete-1:2:4 (Unit 1 cu m.)' (04)

OR

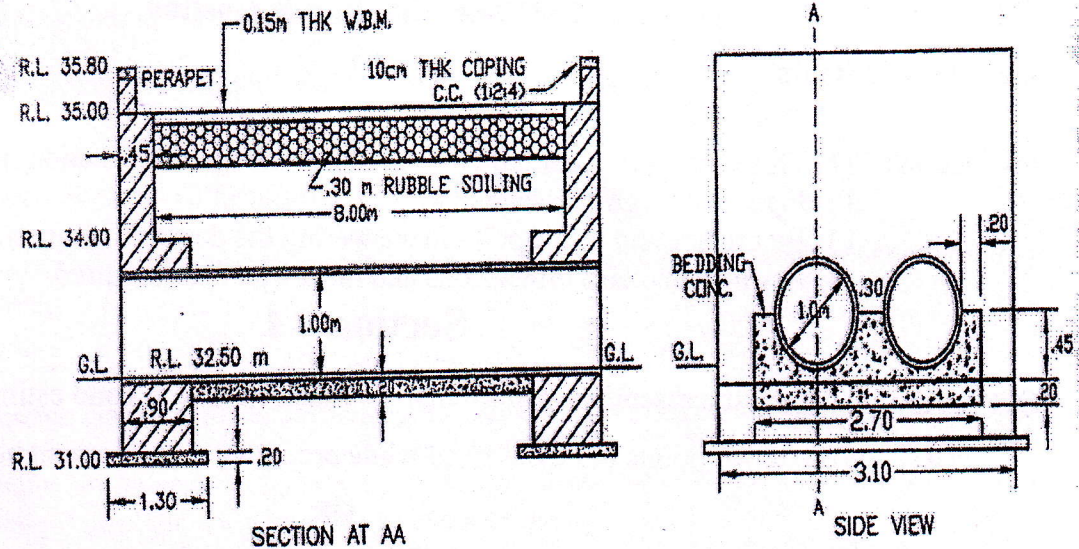
- Q.2 (A) Workout rate analysis for (1) First class Brickwork in Superstructure in Cement (08)
Mortar 1:6, (2) 12mm thick Cement Plastering on wall in CM (1:6)-unit 1 sq. m.
Q.2 (B) Write detailed Specifications for 'Mosaic flooring' (02)
Q.3 Calculate the quantity of earthwork of a portion of a channel with the following (10)
data.(1)Bed width = 5.0m, (2) Free board = 0.4 m, (3) Slope of digging = 1.5:1, (4)
Slope of Banking = 2:1,(5) Full Supply Depth = 1.2 m, (6) Top width of banks =
2.0 m (Left) and 2.30 m (Right).

Distance in m	Ground Level in m	Bed Level in m
0	335.24	334.00
50	334.80	333.94
100	334.43	333.88
150	334.12	333.82
200	334.50	333.78
250	334.98	333.70
300	334.68	333.64
350	334.40	333.58
400	334.60	333.52
450	334.10	333.46
500	333.80	333.40

Section- II

Q.4

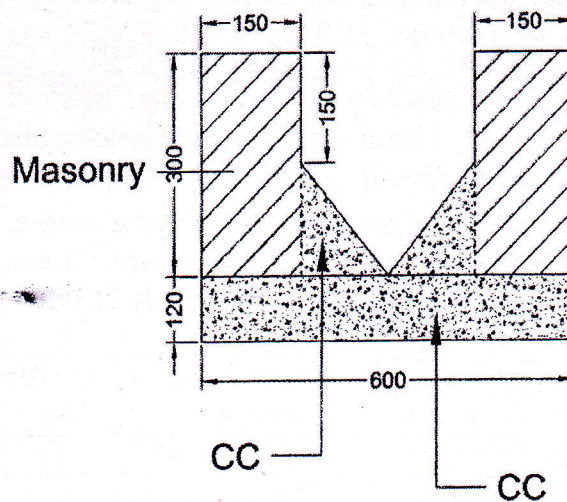
Find out quantity of items for Culvert given below. (1) Excavation (2) Masonry work for abutments in CM 1:6 (3) Cement concrete in foundation and in barrel (4) Plastering in CM 1:6 for exposed surfaces. (10)



OR

Q.4

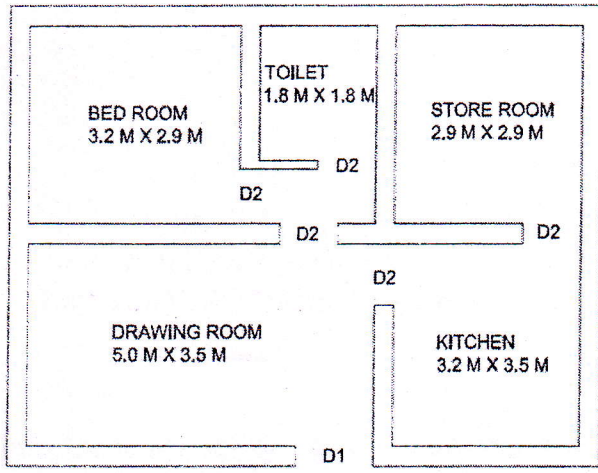
What do you understand by 'Surface Drain' and how it functions? Calculate quantity of surface drain shown below for items (1) CC work (2) Masonry work (3) plastering work on exposed surfaces. Take length of surface drain as 800 m. (10)



ALL DIMENSIONS ARE IN CM

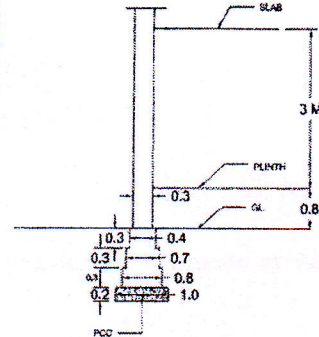
Q.5

Find out quantity of items following "Centre-Line Method" for plan given below. (1) Excavation (2) PCC (3) Masonry work in foundation (4) Masonry work in super structure (5) Plastering Inside. (10)



ALL DIMENSIONS ARE IN M

SYMBOL	SIZE
D1	1.1 M X 2.0 M
D2	0.8 M X 2.0 M



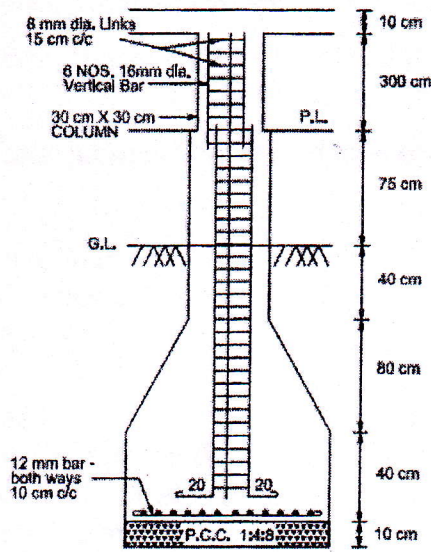
PLAN

SECTION

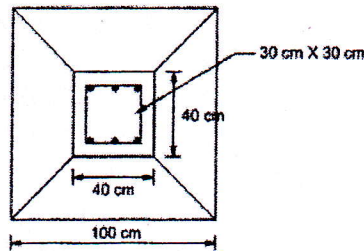
OR

Q.5 Find out quantity for items following “Long wall -Short wall” method. (1) (10)
Excavation (2) PCC (3) Masonry work in foundation (4) Masonry work in super structure (5) Plastering Inside. Refer plan of Q.5.

Q.6 Prepare an estimate for following items using standard rates. [1] CC work (Footings & Column) [2] Steel work of the structure in KG.[3]Formwork. Use suitable market rate. (10)



SECTION



PLAN

“ END OF PAPER ”