

SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (SUPPLEMENTARY), JUNE - 2016

B.Planning I YEAR II SEMESTER

PLANNING PROJECT ESTIMATION (BPLN204)

Maximum Marks – 50

Time – 2.00 Hours

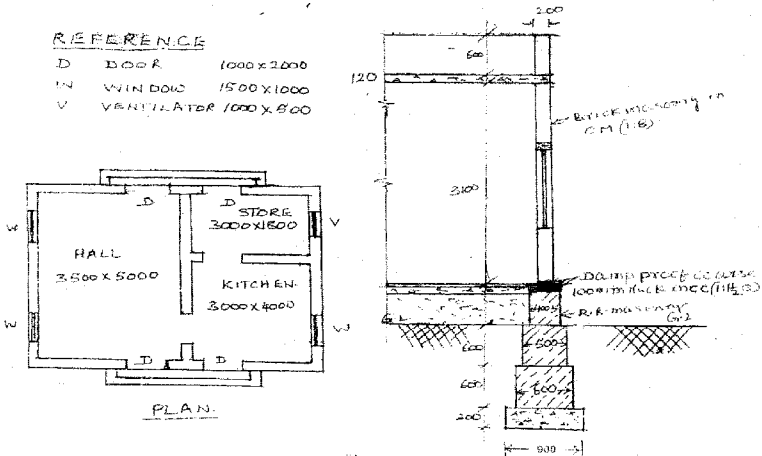
a) Answer any Two questions out of 1 to 4 questions.

b) Question No.5 is compulsory and answer any four out of six sub-questions.

Q1 Prepare the detailed estimate for the following items of work for a building shown in fig.

- a) R.R masonry in C.M 1:6 for footings and basement.
- b) Earth work excavation for foundation
- c) Damp proof course 100mm thick in CC (1:1.5:3).

(3x5=15M)



Q2 Prepare data sheet and calculate the cost of the items given below

- a) Brick Masonry in C.M. (1:6) – 1 cu.m.
- b) C.C. (1:3:6) using 40mm HBG metal – 1 cu.m.

(2x7.5=15M)

Materials and Labour required:

C.C. (1:4:8)		Brick Masonry in C.M (1:5)	
0.92 cu.m.	40mm HBG metal	512 Nos.	Bricks
	Sand	0.20 cu.m.	C.M.(1:6)
	Cement	1.4 Nos.	Masons
0.2 Nos.	Masons	0.70 Nos.	Man Mazdoors
1.8 Nos.	Men Mazdoors	2.1 Nos.	Women Mazdoors
1.4 Nos.	Women Mazdoors	1.0 cu.m	Scaffolding
LS	Sundries	LS	Sundries

Materials cost at site:

40mm HBG metal	= 650/- per Cum
Sand	= 550/- per Cum
Cement	= 5/- per Kg
Brick	= 4/- each

Labour Charges:

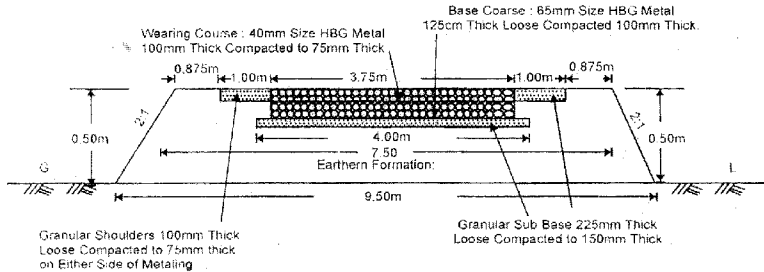
Masons	= Rs. 420.00 per day
Men Mazdoors	= Rs. 350.00 per day

Women Mazdoors	=	Rs. 300.00	per day
Scaffolding charges	=	Rs. 60/-	per 1 cu.m.
Mixing charges	=	Rs. 70.00	per cu.m.

Q3 A.W.B.M is as shown in figure. Calculate the following for a length of 2000m :-

(3x5=15M)

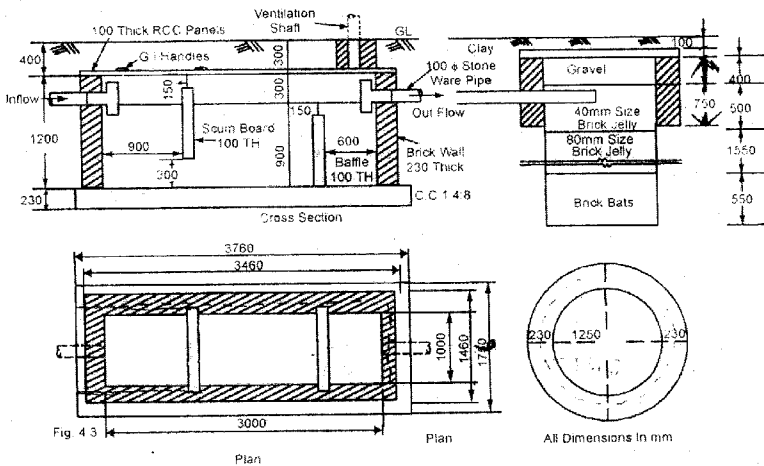
- Quantity of 65mm HBG metal to be collected for base course
- Quantity of 40mm HBG metal to be collected for wearing course
- Quantity of Granular soil to be collected for shoulders and sub base course



Q4 Determine the quantities of the following items of work for specific tank as shown in figure:

(3x5=15M)

- Cement concrete (1:2:4) for roof slab and baffle wall
- Earth work excavation for the septic tank
- PCC (1:4:8) for bed concrete.



Q5 a) Define the term specification and write the types of specifications?

(4x5=20M)

- Write the units of measurement of the following items of work
 - Damp proof course
 - Laying of rain water pipe
 - Earth work excavation
 - RCC for foundation
 - Plastering

c) Prepare a preliminary estimate of a five storied office building having a carpet area of 600 sq.m. Consider 15% of the carpet area for verandah, corridor and stair case and 12% of the carpet area occupied by walls. Take

P.T.O

- a) Plinth area rate: Rs. 15000 m²
- b) Add for architectural works: 1% of the cost
- c) Add for water supply and sanitary works: 10% of the cost
- d) Add for electrical works: 5% of the cost
- e) Add for unforeseen items: 1% of the cost
- f) Add for supervision charges: 2% of the cost.
- d) Define i) SSR ii) Lead statement
- e) Write the differences between detailed estimation and approximate estimation.
- f) The following table shows the area of consecutive contours. The contour interval is equal to 5m. Calculate the capacity of reservoir by Trapezoidal rule.

Contour No.	1	2	3	4	5	6	7	8	9
Area in m ²	200	250	300	290	285	270	260	250	230