

MANOHARGAD-VI (2010 COURSE: WINTER - 2015)
SUBJECT: QUANTITY SURVEYING & SPECIFICATION WRITING

Day: **Friday**
Date: **20-11-2015**

Time: **2:00 P.M. To 5:00 P.M.**
Max. Marks: 100

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate full marks.
- 3) Both the sections should be written in **SEPARATE** answer book.
- 4) Assume data if necessary.

SECTION-I

- Q.1** Work out the quantities for the following items of work based on the details [30]
given in accompanying diagram (**ANY FIVE**)
- a 230mm brick work (guest room only)
 - b Cemaic tile dado and flooring (for toilets)
 - c Internal plaster for walls and ceiling (guest room only)
 - d W.H.B.
 - e Vitrified tile flooring and skirting for lobby
 - f R.C.C. lintel for widows
 - g R.C.C. columns M20 in ground floor
- Data
Footing size 1200mmx1200mm, D=450mm, d= 200mm
Bearing of lintels 300mm
RCC slab thickness 130mm
Internal brick wall 150mm
External brick wall 230mm
- Q.2** State the Unit of measurement (as per IS:1200) for the following items of work [10]
- a R.C.C slab
 - b Excavation in hard murum
 - c 230mm thk brick wall
 - d Melamine polish to T.W. door
 - e Flush door
 - f M.S. railing
 - g Steel for trust
 - h R.C.C chajja
 - i R.C.C lintel
 - j PVC pipe drainage
 - k I.C chamber
 - l Stop cock
- Q.3** Write short Notes on (**Any TWO**) [10]
- a Indent of materials
 - b Profit and overheads
 - c Contractors interim certificate
 - d Rules for deducting plaster

- Q.4 Work out analysis of rates for the following items of work (Any TWO) [10]
- a 230th brick masonry in cm 1:6
 - b External cement plaster cm 1:4 sand face finish
 - c R.C.C beams (1:2:4)
 - d PCC in foundation 1:3:6

Data: Materials

Cement: Rs. 300 per bag
Sand: Rs 2000 per cum
Bricks: Rs 7 each
Aggregate: Rs 1200 per cum

Data: Labour

Beam Rs. 700 per cum
Brickwork: Rs. 500 per cum
External Plastering: Rs 120 per sqm
PCC (1:4:8): Rs 700 per cum

SECTION-II

- Q.5 What is the role of specification in quality control of construction? Explain by giving examples of at least one item of construction. [10]
- Q.6 Write detailed specifications for the following items [10]
- a T.W. frames for doors
 - b Coarse aggregate for concrete
 - c Kotah stone for flooring
 - d Water for construction work
- Q.7 Write brief specifications as mentioned in BOQ (Any TWO) [10]
- a Rough Shahabad for flooring
 - b P.C.C. for footing
 - c Clearing of the site
 - d External plaster work
- Q.8 Specify following materials by trade/Manufacturer's names (Any TEN) [10]
- a Split A.C
 - b Escalators
 - c Glass for doors
 - d Ceramic tiles
 - e Mirror
 - f Aluminum composite panel
 - g WHB
 - h PVC pipe for rainwater
 - i Cement
 - j Oil paint
 - k S.S. sink
 - l Structural steel

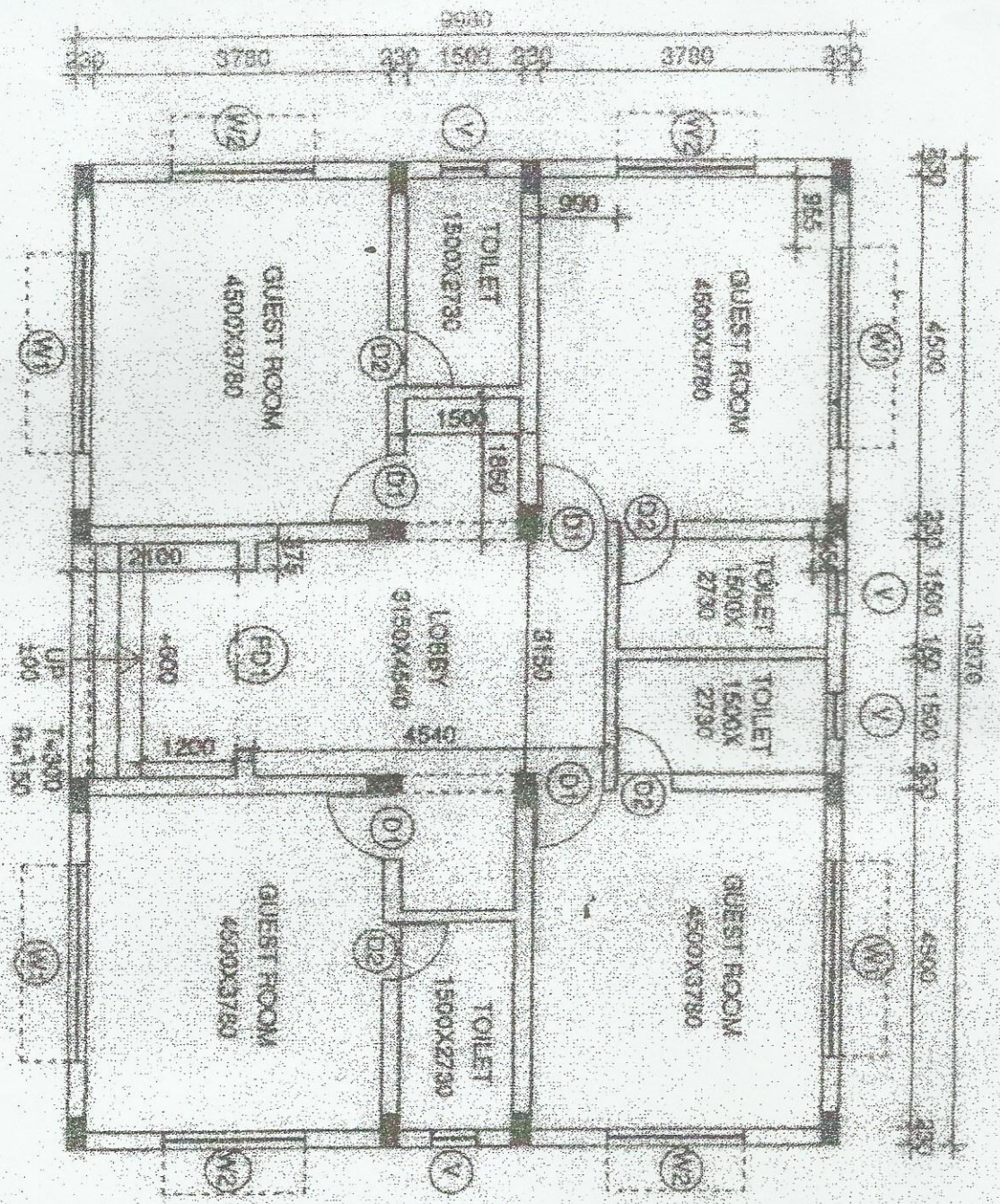
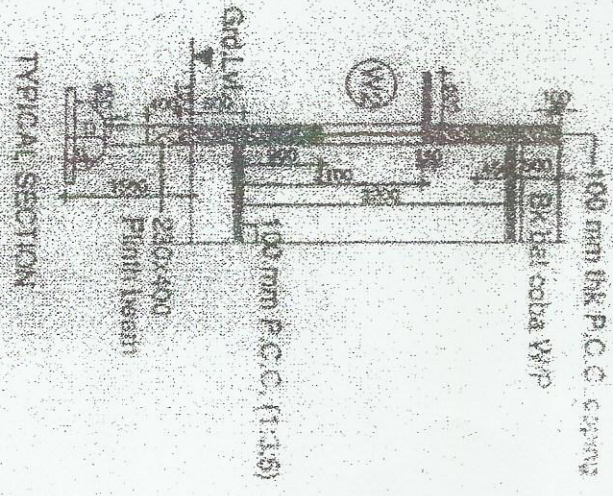


FIG. NO. 1



- W1 = 2500 X 1200
- W2 = 1800 X 1200
- V = 500 X 600
- D1 = 800 X 2100
- D2 = 750 X 2100
- FD1 = 2400 X 2100

MANOHARGAD - VI (2010 COURSE): SUMMER - 2016
SUBJECT : QUANTITY SURVEYING & SPECIFICATION WRITING

Day : **Monday**
 Date : **02-05-2016**

Time : **10:00AM TO 1:00P.M.**
 Max. Marks : 100

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non programmable **CALCULATOR** is allowed.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.
- 5) Answers to both the sections should be written in **SEPARATE** answer books.
- 6) Assume suitable data **WHEREVER** necessary.

SECTION - I

- Q.1** Work out quantities of **ANY FIVE** of the following items of work based on [35]
 accompanying diagram.
- a) RCC footing.
 - b) Glazed tile dado in bathroom and W.C (assume dado height to be 2.1m).
 - c) Flooring in living, kitchen, bed and passage.
 - d) Mass brick work for steps.
 - e) Internal plastering for living- ceiling and walls only.
 - f) Teakwood doors.
 - g) 110 mm thick internal brick work.
- Q.2** Explain any two types of preliminary estimates. [10]
- Q.3** Explain IS:1200. State its importance. [05]

OR

Explain mode of measurement of RCC columns mentioning unit of measurement.

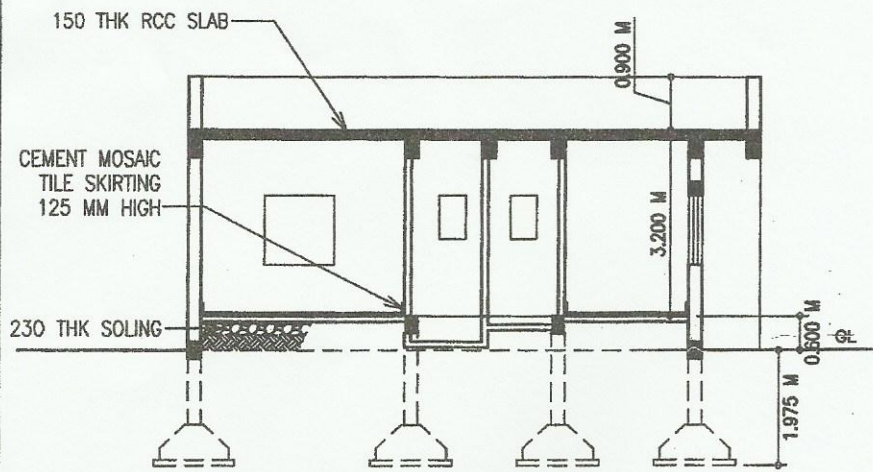
SECTION - II

- Q.4** Analyse rates of **ANY THREE** of the following items of works using the basic [15]
 rates given below:
- a) External sand face cement plaster in cm 1:4 - 18mm thick.
 - b) RCC (1:2:4) slab 14cm thick excluding reinforcement.
 - c) 23 cm thick B.B.M. in cm 1:6.
 - d) U.C.R. masonry in cm 1:6.

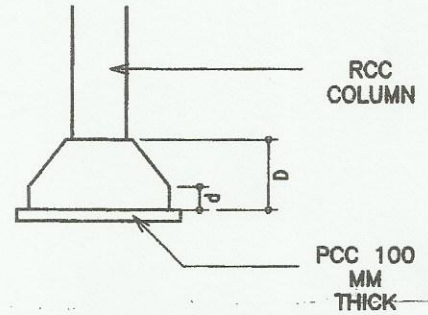
Rates of materials		Rates of labour	
Cement	Rs. 280 / bag	External plaster	Rs. 150/m ²
Sand	Rs. 3000/ m ³	23cm thick B.B.M.	Rs. 650/m ³
Aggregate	Rs. 875/m ³	ULR masonry	Rs. 700/m ³
Bricks	Rs. 6/ no.	RCC slab	Rs. 7800/m ³
Rubble	Rs. 875/m ³		

- Q.5** Write detailed work specification of **ANY TWO** of the following: [20]
- a) Excavation in soft murum.
 - b) PCC subfloor bed.
 - c) Internal plaster with neeru finish.

- Q.6** Write notes on **ANY THREE** of the following: [15]
- a) Contingencies
 - b) Overheads
 - c) Open and closed specifications
 - d) Importance of specifications in contract document



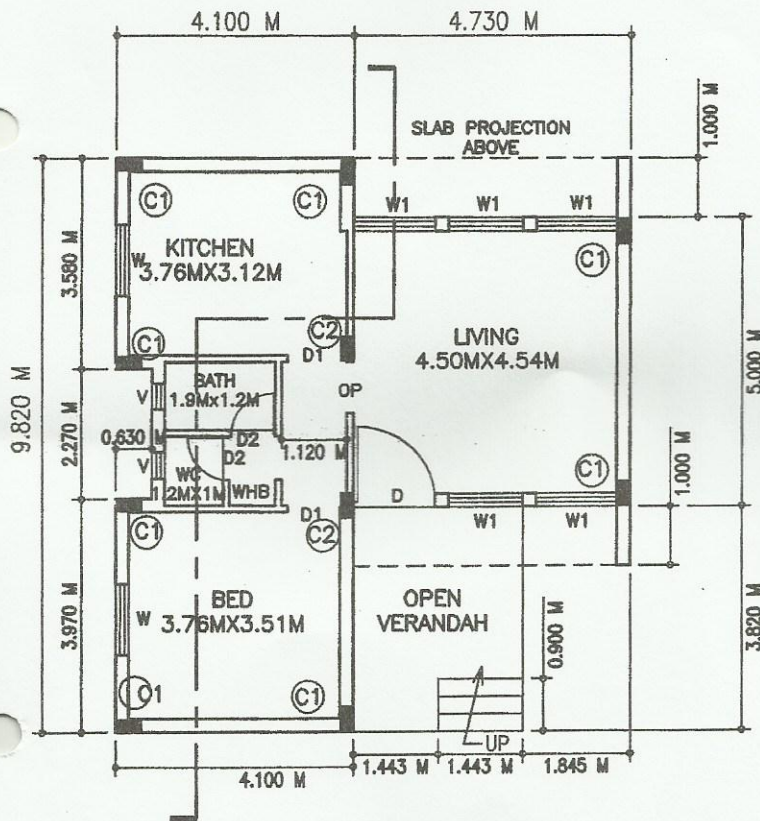
SECTION



TYPICAL COLUMN & FOOTING SKETCH

COLUMN SCHEDULE

COLUMN MARKED	COLUMN SIZE IN MM	FOOTING SIZE IN MM	D MM	d MM
C1	230X460	1200X1200	600	200
C2	230X460	1400X1400	750	200



GROUND FLOOR PLAN

DOOR SCHEDULE

D=1.35MX2.10M
 D1=0.90MX2.10M
 D2=0.75MX2.10M

MS WINDOW SCHEDULE

W=1.20MX1.20M
 W1=1.34MX1.20M
 V=0.60MX0.75M

BEAMS SCHEDULE

ALL FLOOR BEAMS 230X460 CROSS SECTION SIZE
 ALL PLINTH BEAMS 230X300 CROSS SECTION SIZE

SPECIFICATIONS

EXT WALL 230 THK BBM
 INT WALL 110 THK BBM