

T. Y. B.ARCH. SEM – VI (2010 COURSE) : SUMMER - 2019
SUBJECT : QUANTITY SURVEYING & SPECIFICATION WRITING

Day : Wednesday
Date : 08/05/2019

Time : 10.00 AM TO 01.00 PM
Max. Marks : 100

S-2019-3733

N.B.:

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

SECTION – I

Q.1 Work out quantities of **ANY FIVE** of the following: **[35]**

- a) RCC footings
 - b) RCC Plinth beams
 - c) RCC slab
 - d) Burnt brick masonry 230 thick in superstructure
 - e) Internal plaster in living and Bed – 1
 - f) Glazed tile dado in W.C. and bath
 - g) Murum filling in plinth
- Assume lintel size 230 mm × 230 mm with 150 mm bearing.
Glazed tile dado height 2.1m in W.C and bath.
PCC subfloor base 100 mm thick.

Q.2 Analyze the rates of **ANY THREE** of the following items: **[15]**

- a) 230 mm thick brick masonry in c.m. 1:6.
- b) PCC 1:4:8 subfloor base – 100 mm thick.
- c) Mosaic tile flooring.
- d) RCC 1:2:4 slab excluding reinforcement – 150 mm thick.
- e) External plaster 18 mm thick.

Rates of materials		Rates of labour	
Cement	₹ 280 per bag	Brick work	₹ 800 cum
Sand	₹ 3500 per cum	PCC	₹ 120 sqm
Brick	₹ 10 per number	Mosaic tile flooring	₹ 200 sqm
Coarse Aggregate	₹ 1500 per cum	RCC slab	₹ 130 sqm
Mosaic tile	₹ 350 per sqm	External plaster	₹ 200 sqm

Q.3 Explain role of Bill of Quantities, working drawing and specifications in contract document. How are these supplementary to each other? **[10]**

SECTION – II

Q.4 Define specifications and describe briefly different types of specifications. Elaborate any two types of specifications. **[10]**

P.T.O.

Q.5 Write short notes on **ANY TWO** of the following: **[10]**

- a) Slump test
- b) Brief specification for excavation for RCC footing in hard murum
- c) Brick to be used for construction
- d) Freshness and storage of cement
- e) Concrete cube test

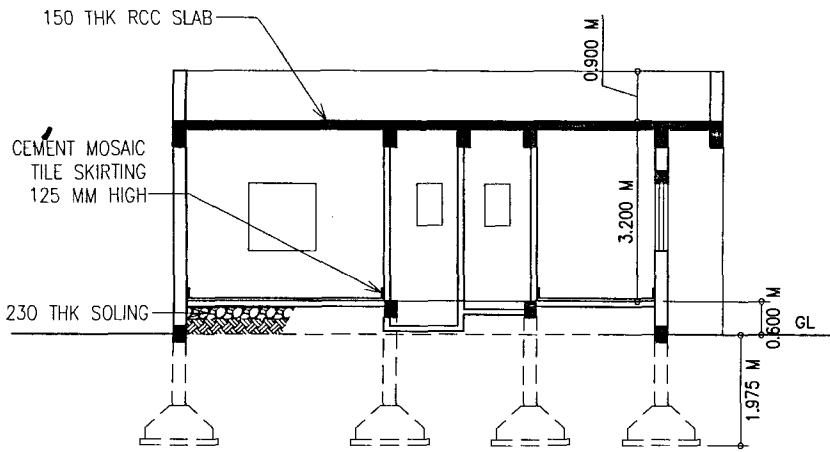
Q.6 Write brief specification of **ANY TWO** of the following items of work as mentioned in BOQ: **[10]**

- a) Neeru finish plaster to walls.
- b) UCR masonry.
- c) RCC 1:1.5:3 for footing.
- d) 110 mm thick burnt brick masonry wall.

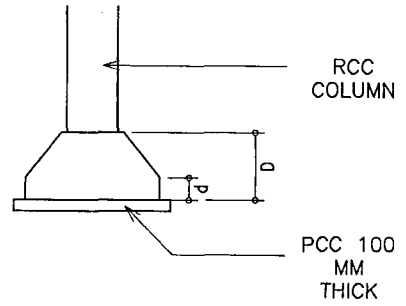
Q.7 Specify following materials by trade or manufacturer's name and also mention unit of measurement (**ANY TEN**): **[10]**

- | | |
|--------------------|--------------------------|
| a) Ceramic tiles | g) Split Air Conditioner |
| b) Ceiling fans | h) G.I. sheet roofing |
| c) UPVC windows | i) Modular switches |
| d) Water heater | j) Bathroom fittings |
| e) Electric cables | k) Laminate |
| f) Mirror | l) European W.C. |

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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

DOOR SCHEDULE

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

MS WINDOW SCHEDULE

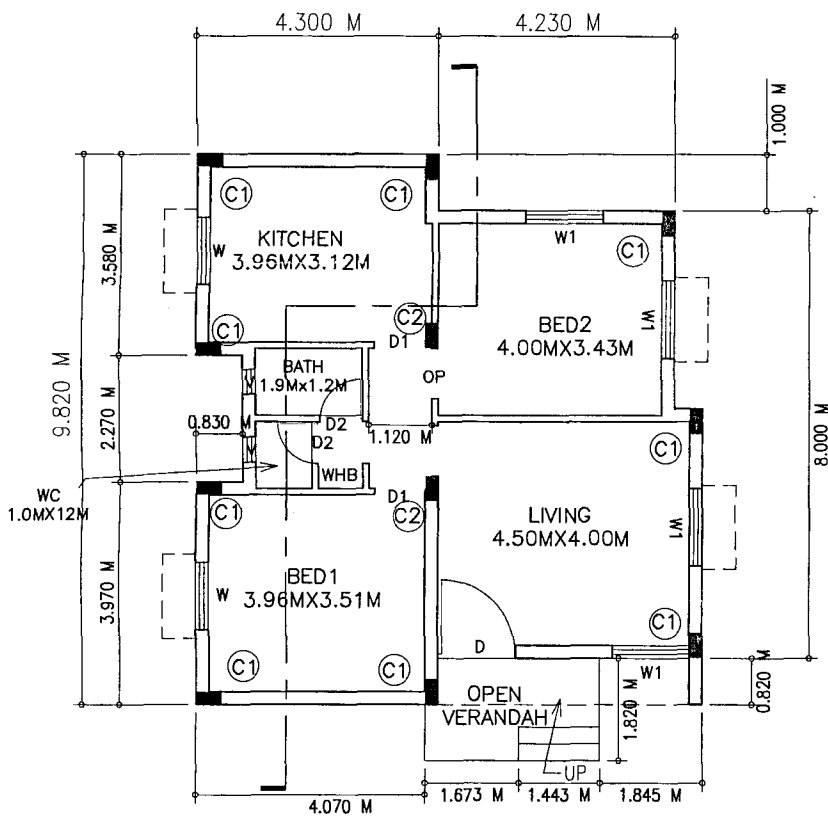
W=1.20MX1.20M
W1=1.34MX1.20M
V=0.60MX0.75M

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



GROUND FLOOR PLAN