TED (15)-5014
(Revision- 2015)

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – APRIL -2020.

QUANTITY SURVEYING-II AND VALUATION

(Maximum Marks : 75) [Time : 2.15 hours]

[Note:- 1. Missing data if any may be suitably assumed.
2. Sketches to be accompanied.
3. Quantities to be worked out standard form].

PART–A

Marks

I. Answer **any three** questions in one or two sentences. Each question carries 2 marks.

1. Mention different types of tile roof.
2. What is Abstract Estimate.
3. Write the importance of specification in Quantity Surveying.
4. Define the term sinking fund.
5. Mention the term annuity. (3x2=6)

PART - B

II Answer **any four** of the following questions . Each question carries 6 marks.

1. Write the rules for taking quantity of plastering area of building.
2. Calculate the quantity of earth work for septic tank (fig.III).
3. Calculate the quantity of R.C.C. work 1:2:4 for slab culvert (fig.II)
4. Write the importance of bar bending schedule in quantity surveying.
5. Write short notes on scrap value, salvage value, market value.
6. Mention the main purpose of valuation.
7. Differentiate free hold property and lease hold property. [4x6 =24]

PART - C

(Answer **any of the three units** from the following. Each full question carries 15 marks)

UNIT I

III (a) Calculate the quantity of Random Rubble rubble masonry for basement of the building shown in fig.I (6)

(b) Calculate the quantities of the following items of work of septic tank and soak pit.

(i)First class brick work in C.M. 1:5 (ii) Covering slab of septic tank. (9)

OR

IV (a) Estimate the quantity of plastering inside of the septic tank, using 12 mm thick cement plaster 1:2, added with water proofing compounds including the baffle wall side. (6)

(b) Calculate the quantity of R.C.C. work 1:2:4 in roof slab and sunshade for the building shown in fig.I, consider sunshade projection is 0.6mtr. with an average thickness of 65mm and thickness of roof slab is 0.12 Mtr. (9)

UNIT- II

V Calculate the following quantities of items for the slab culvert shown in fig.II

(a) P.C.C. 1:4:8 for Abutments and wing wall. (6)

(b) Ist class brickwork in C.M. 1:4 for Abutments and wingwalls. (6)

(c) R.C.C. work 1:2:4 for slab (3)

OR

VI Work out the quantity of steel for base slab of retaining wall of length 30 mtr. shown in fig IV. Assume a cover of 50mm (Wt. bar-16mm-15.8Kg/m, 10mm-0.62kg/m). (15)

UNIT- III

VII (a) Calculate the quantity of an R.C.C. work 1:2:4 for Lintel of given building in fig.I (7)

(b) Write the detailed specification for the cement concrete 1:2:4 (8)

OR

VIII (a) Prepare the barbending schedule of the R.C.C. Beam shown in fig.IV. (8)

(b) Write the detailed specifications for plastering. (7)

UNIT – IV

IX (a) Mention the main purposes of valuation. (7)

(b) What is meant by Depreciation. Write the different methods of calculation of Depreciation. (8)

OR

X (a) Write the different methods of valuation. (6)

(b) A building costing Rs.8 lakh has been constructed on a freehold land measuring $100m^2$ recently in a city. Prevailing rate of land in the neighbourhood is Rs.$1300/m^2$. Determine the net rent of a property if the expenditure on an outgoing including sinking Fund is Rs.40,000 per annum and expecting net return on building @6% of the cost on land @4% of the cost. Work out the gross rent of property per month. (9)

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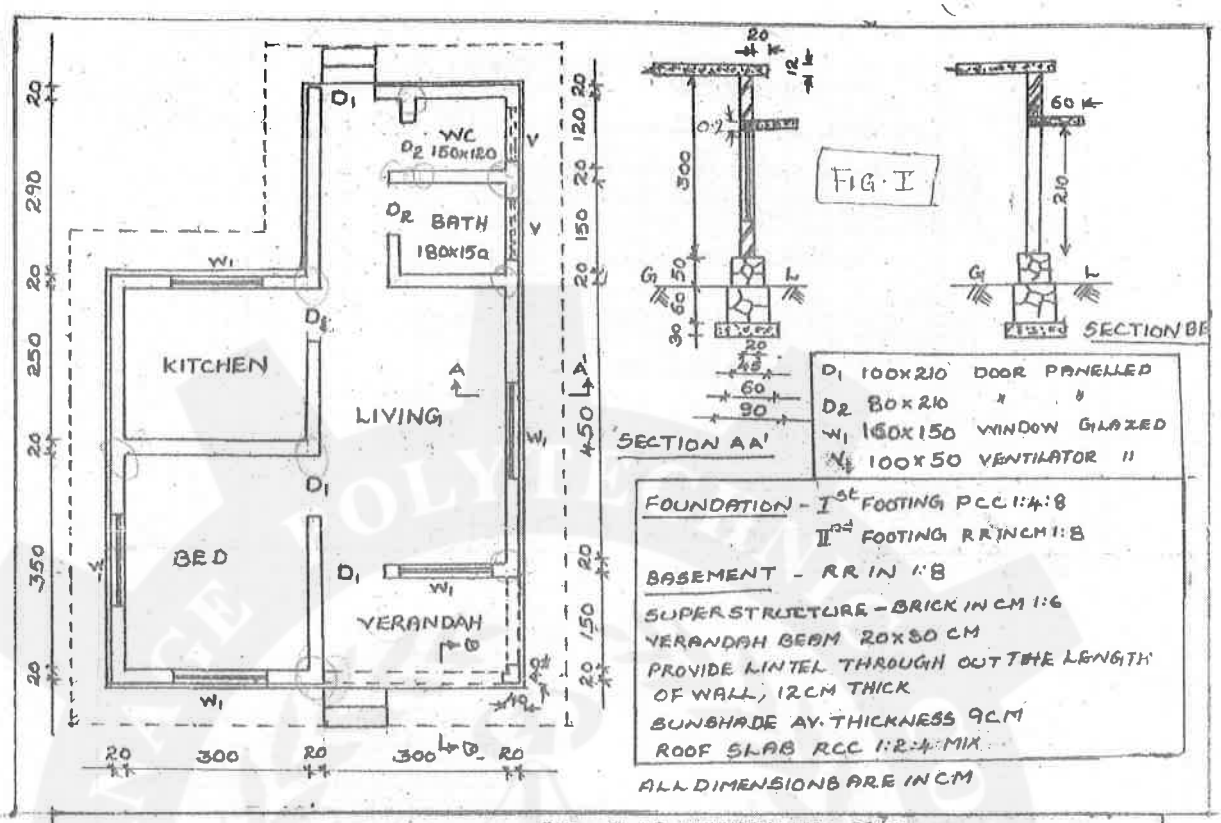
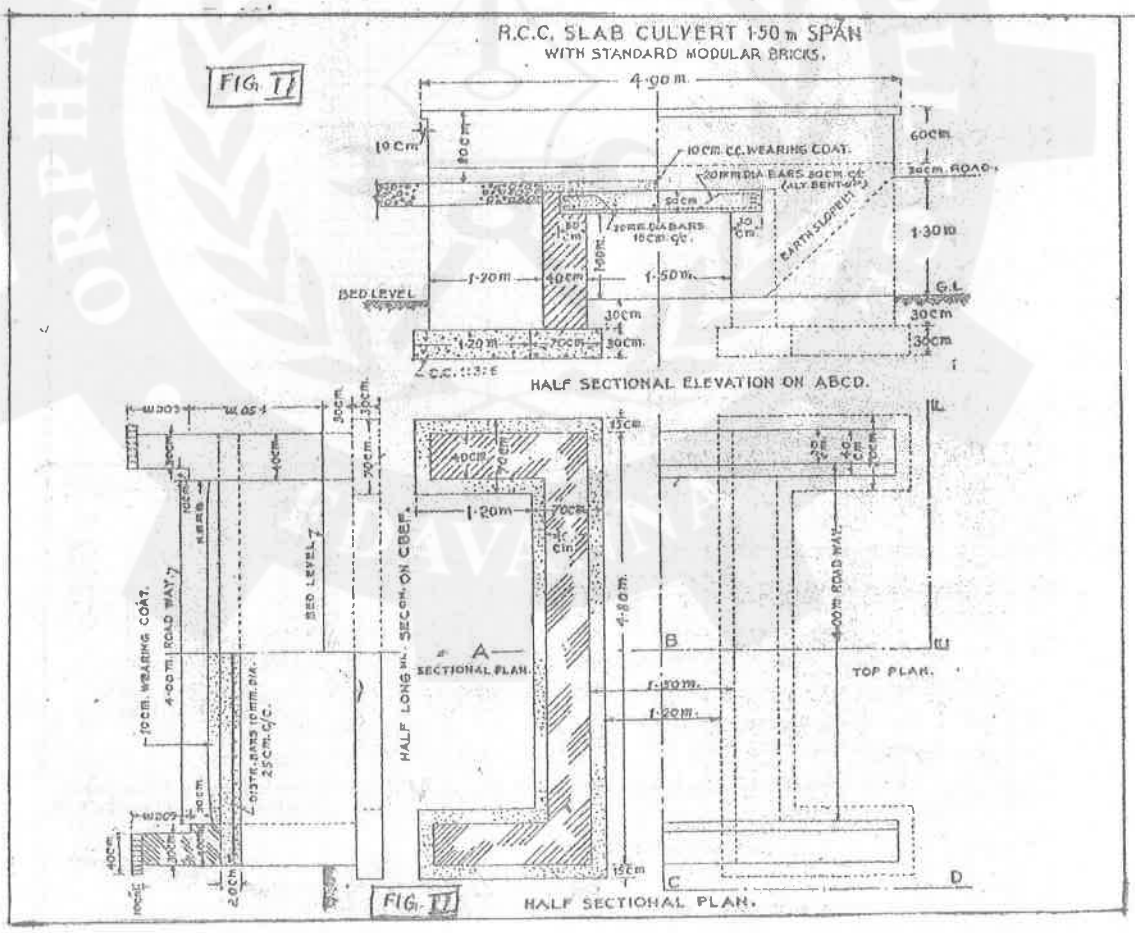


KITCHEN
LIVING
BED
VERANDAH
WC
D2 150x120
D2 BATH
180x150
D1
W1
V
A
A'
SECTION AA'
SECTION BB
FIG. I
D1 100x210 DOOR PANELLED
D2 80x210 " "
W1 160x150 WINDOW GLAZED
V1 100x50 VENTILATOR "
FOUNDATION - Ist FOOTING PCC 1:4:8
IInd FOOTING RR IN CM 1:8
BASEMENT - RR IN 1:8
SUPERSTRUCTURE - BRICK IN CM 1:6
VERANDAH BEAM 20x30 CM
PROVIDE LINTEL THROUGH OUT THE LENGTH OF WALL, 12CM THICK
SUNSHADE AV. THICKNESS 9CM
ROOF SLAB RCC 1:2:4 MIX
ALL DIMENSIONS ARE IN CM



R.C.C. SLAB CULVERT 1.50 m SPAN
WITH STANDARD MODULAR BRICKS.
FIG. II
4.90 m
10 cm. CC. WEARING COAT.
30 cm. ROAD
EARTH SLOPE
BED LEVEL
G.L.
HALF SECTIONAL ELEVATION ON ABCD.
SECTIONAL PLAN.
TOP PLAN.
HALF LONG. SECON. ON CBEF.
10 cm. WEARING COAT.
4.00 m. ROAD WAY.
DISTR. BARS 10 mm. DIA. 25 cm. C/C.
FIG. II
HALF SECTIONAL PLAN.

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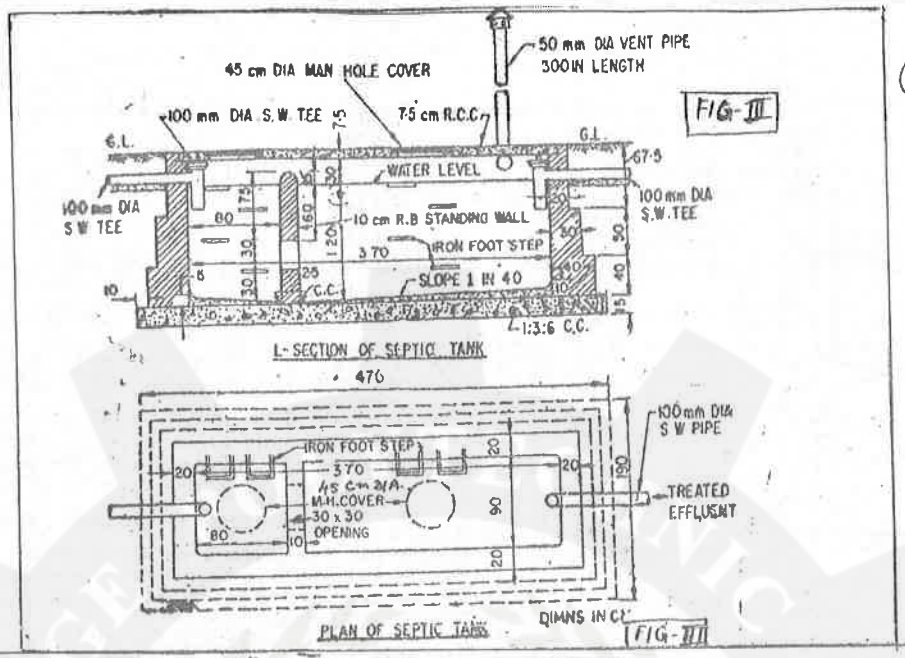
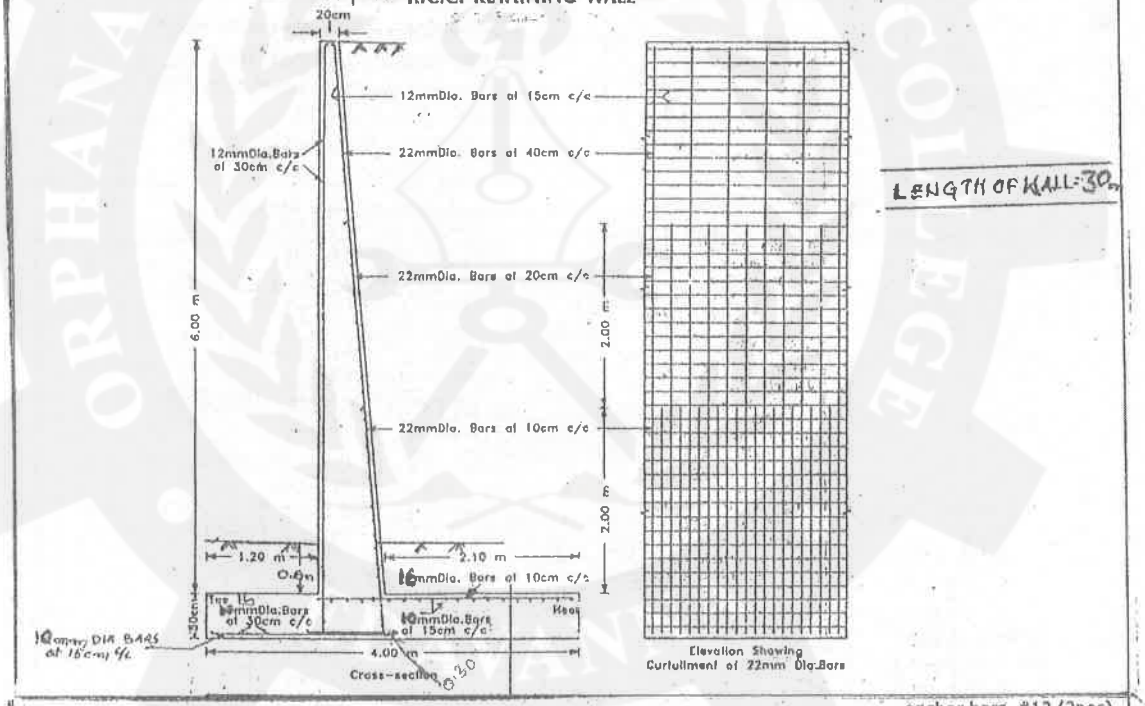


FIG-III

FIG-III

FIG.IV R.C.C. RETAINING WALL



LENGTH OF WALL-30m

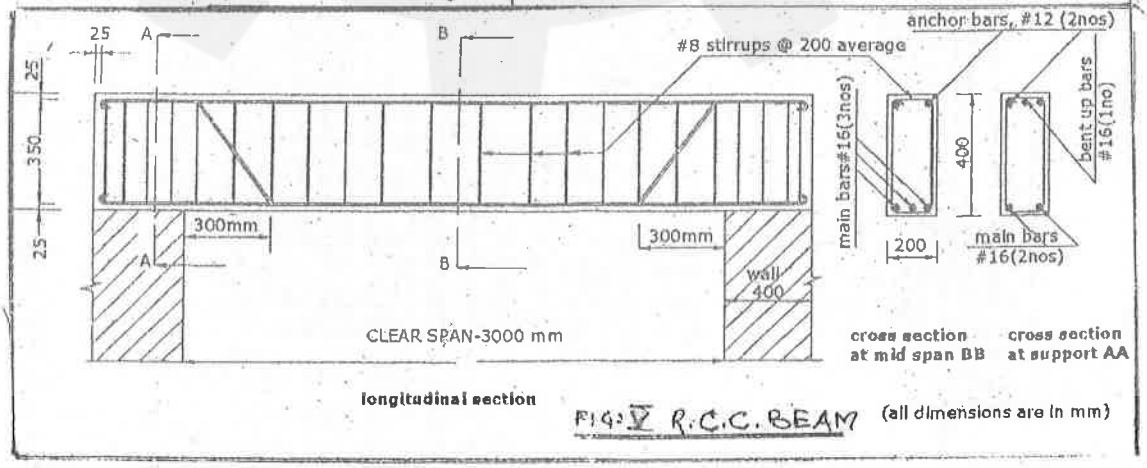


FIG:V R.C.C. BEAM (all dimensions are in mm)