



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA

EBC 2305 : MEASUREMENT OF BUILDING WORKS

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Dec 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

- Pocket calculator

- Standard method of measurement for building works

This paper consists of **FIVE** questions. Attempt any **THREE** questions.

Do not write on the question paper.

Mobile phones are not allowed in the examination room.

Question ONE

Take off all quantities for the underground water tank works shown in drawing no 01. **(20marks)**

Question TWO

Take off all quantities for the finishes shown in drawing no 02. **(20marks)**

Question THREE

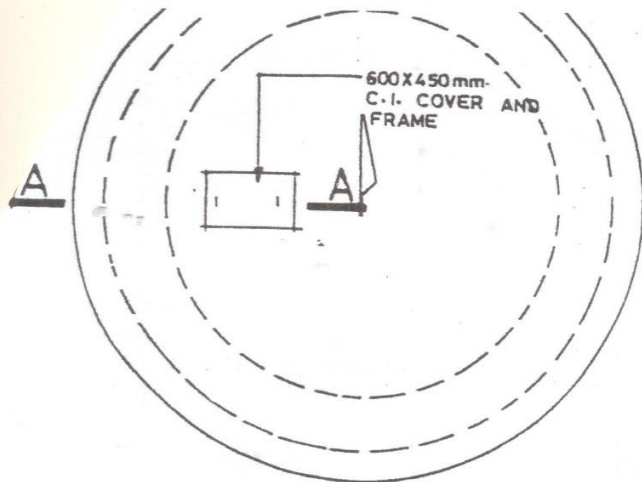
Take off all quantities for the pitched roof shown in drawing no 03. **(20marks)**

Question FOUR

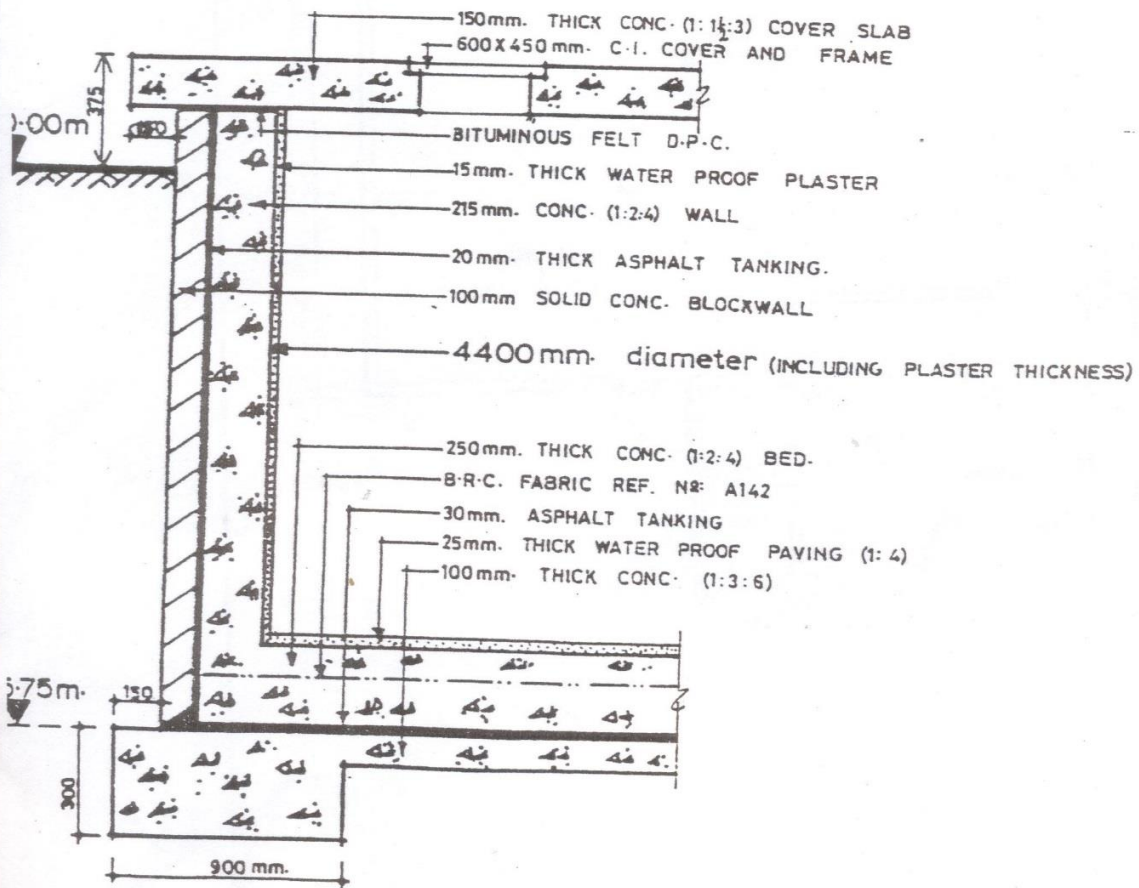
- a. Briefly describe the following types of contracts (10 marks)
- i. Bills of quantities contracts
 - ii. Lump sum contract
 - iii. Cost plus fixed fee contract
 - iv. Cost plus percentage fee contract
- b. Outline the process of tendering and outline the following methods of tendering
- i. Selective tendering
 - ii. Package deal tendering (10marks)

Question FIVE

- a. Explain the use of the term “Elemental Bill” (5marks)
- b. Outline **THREE** general rules of abstracting (6marks)
- c. Briefly explain the following monies as used in the bills of quantities
- i) Contingency sums
 - ii) Provisional sums
 - iii) Prime cost sums (9marks)



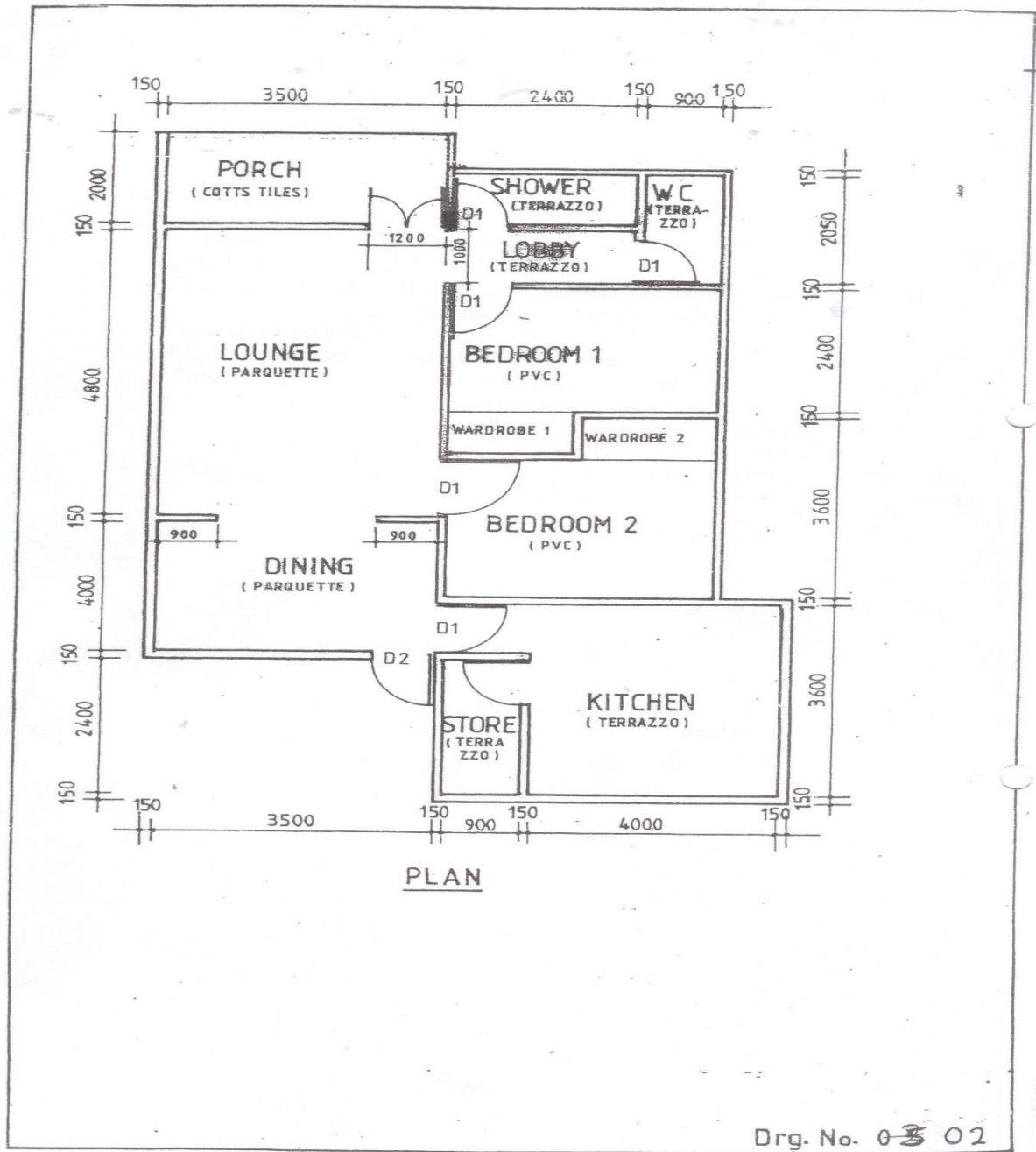
PLAN



SECTION A-A
(underground water chamber)

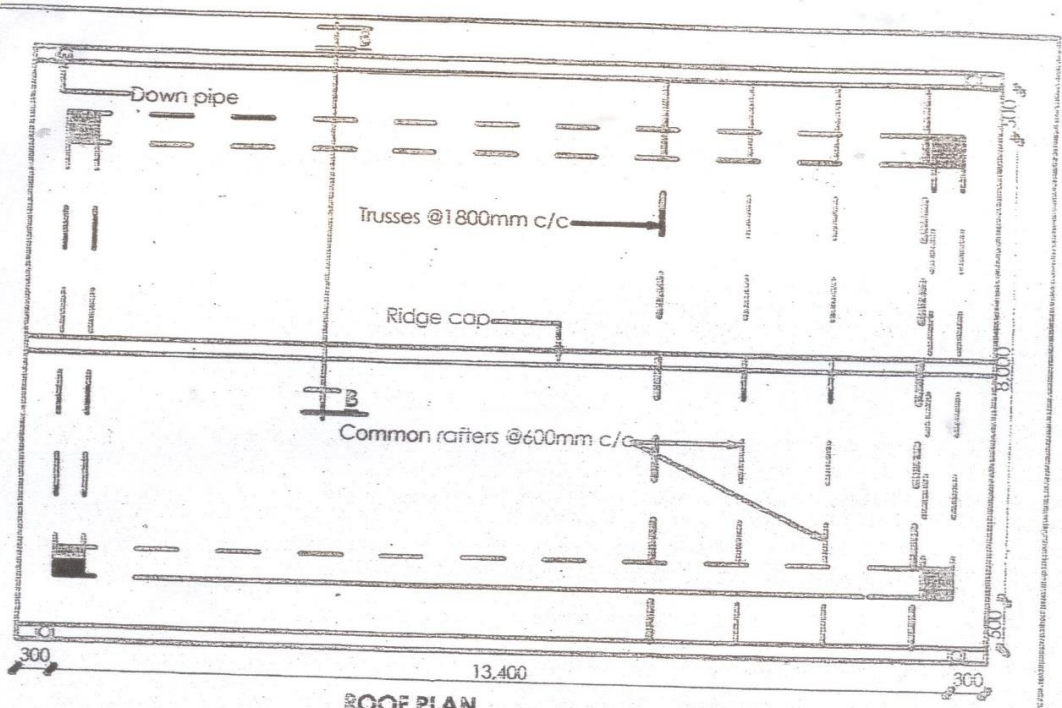
DRG. N^o: 01

Turn over

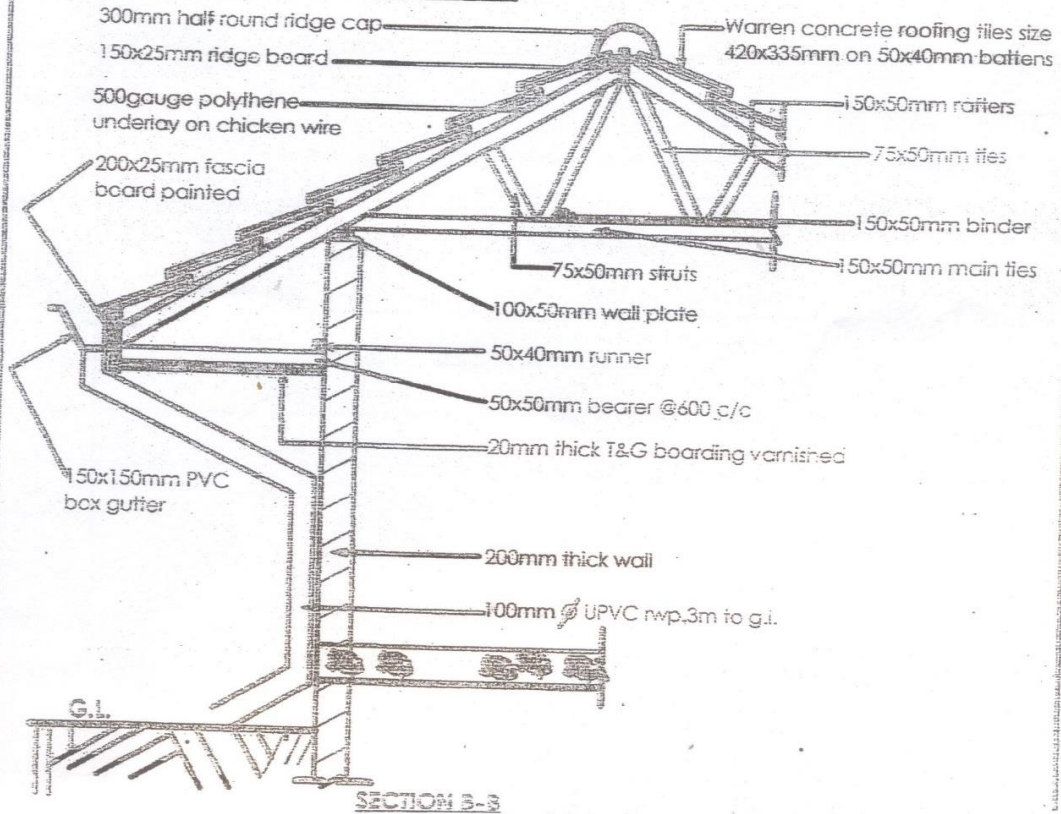


SPECIFICATION

Finished level of floor from concrete slab	32 mm
pvc tiles	size 250 × 250 × 2 mm
Parquet	mahogany size 125 × 125 × 10 mm
Screed	mortar mix (1:3) cement/sand
All hardwood	varnished
All softwood	painted
Terrazzo	to have size 20 × 3 mm plastic strips
Colts tiles	size 200 × 200 × 20 mm
Skirting	20 × 100 mm high hardwood for lounge, bedrooms, dining, porch and terrazzo for all other rooms
Floor to ceiling height	2500 mm
All door openings	size 900 × 2100 mm
Walls	all wet areas to have glazed tiles size 150 × 150 × 6 mm to a height of 1200 mm above which 12 mm plaster and three coats of oil paint is to be applied; other rooms plastered and painted with three coats of emulsion paint
Ceiling	12 mm thick soft board and three coats of distemper except for the lounge/dining where 25 mm t & g hardwood shall be used
Cornices	to match ceiling material and 100 mm wide.



ROOF PLAN



DRAWING NO: 03