

UNIVERSITY OF SOUTH AUSTRALIA  
SCHOOL OF GEOINFORMATICS, PLANNING & BUILDING

Course: Quantity Surveying 1N (10289)  
Examination: Semester Exam – Final 2002  
Duration: 3 hours ( plus 10 minutes reading time)  
Examiner: Tim O'Leary, ext 22921

**INSTRUCTIONS TO CANDIDATES:**

- **THIS EXAM IS WORTH 60% OF THE TOTAL COURSE MARKS**
  - **ATTEMPT ALL QUESTIONS. READ EACH QUESTION CAREFULLY**
  - **MARKS ALLOCATED FOR EACH QUESTION ARE SHOWN IN BRACKETS**
  - **NO REFERENCE MATERIALS ARE ALLOWED OTHER THAN THE AUSTRALIAN STANDARD METHOD OF MEASUREMENT ASMM5**
  - **A CALCULATOR IS ALLOWED**
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Question 1. ( marks 15%)

Describe the functions of a Bill of Quantities in the tendering of Building works, listing some of the advantages in the use of BQs. Explain the use of Provisional and Prime Cost sums.

Question 2. (marks 15%)

Indicate by a graph or table the typical cash flow profile of a construction project. Show how monies retained as security for performance by the Contractor will influence the project cash flow.

Describe the breakdown of a typical progress payment to the Builder and how variations to the contract sum are valued.

Question 3. (marks 10%)

Define what are Preliminaries items and describe the importance of Preliminaries items for a construction project . List some examples of both fixed and time related preliminaries items.

Question 4.

(marks 60%)

In accordance with general taking off principles and the appropriate sections of the Australian Standard Method of Measurement ASMM5, measure and describe the items for the External masonry and Internal walls( timber framing and linings) as per drawings QS1N –1 and 2 including specification notes indicated below and on the drawings. Rule your answer booklet with appropriate dimension, timesing and squaring columns. Show total billed quantity for each measured item. Include relevant Preamble items. In the absence of specific information make reasonable assumptions.

### MASONRY

Modular clay facing bricks 290 x 90 x90 in stretcher bond. Composition mortar 1:1:6. Quoins shall be in commons. Control joints as detailed.

Clean down all face brickwork on completion with 5% hydrochloric acid solution and wash off with clean water.

Provide and build in 4mm diameter galvanised wire wall ties to cavity of brick veneer walls spaced 900mm apart every fourth course in height and staggered.

Sills to all windows shall be face brick on edge sills set to weather.

Lintels (measured elsewhere) shall be 75 x 10 galvanised steel bar built into brickwork at ends.

Provide and built in 500um black embossed polyethelene damp proof course to junction of footing and wall to project 10mm beyond brickwork.and turned up 150mm at inner leaf.

Note: DPCs at openings not measurable (supplied as part of door and window assemblies).

### INTERNAL WALLS AND PARTITIONS

Timber framing as indicated on drawing QS1N-1. Fixing shall be by nailing except bottom plates bolted to floor slab with 12mm *Dynabolts* at 450mm centres.

Linings to internal rooms shall be 10mm gypsum plasterboard with flush joints fixed to timber stud framing.In wet areas use 10mm 'water resistant' plasterboard ditto. Wet areas are Bath, WC ,Laundry and Vanity area.

Wall lining to Garage shall be 6.4mm masonite fixed with coach screws to timber framing.

**Note: calculation of opening sizes for doors All internal doors 2055mm high. Door width as indicated on plan (figured dimension) plus allowance for 45mm thick frame to jambs and heads. e.g. for 820 mm x 2055mm door, opening size is 910mm x 2090mm. Window opening sizes to be scaled from drawings.**