NOTES TO CANDIDATES:

This is not an open book examination. Only the following reference material will be permitted in the venue:


All work is to be measured in accordance with the latest edition of the Standard System of Measuring Building Work

**NO** class notes, drawings, or take-offs will be permitted in the venue.

Calculators will be permitted except programmable calculators.

Students are to answer ALL (5) questions

Mark allocations are indicated adjacent to each question.

This question paper may not be retained by the candidates and must be returned with the scripts.

All drawings must be returned with the scripts.

**GENERAL INSTRUCTIONS**

1. All queries, assumptions and notes are to be recorded in query sheets.
2. Where information is not provided or where the drawings are silent, you are to make reasonable assumptions.
3. No dimensions check and squaring of dimensions are required.
4. No drawing register is required.
5. A measuring list is required
6. All dimensions must be referenced
7. The questions are unrelated
QUESTION 1 (PRELIMINARIES)

Alternative A provides for the Adjustment of Preliminaries in accordance with 3 categories viz. (F) Fixed, (V) Value and (T) Time in the Preliminaries section of the tender / contract document. Explain each term in the context of the tender document. (6)

QUESTION 2 (PRELIMINARIES)

Options A, B and C are provided for Temporary Services such as Water and Electricity in a tender document. Choose one (1) such temporary service and explain each option in accordance with the Preliminaries document. (9)

QUESTION 3 (WATERPROOFING)

Measure on dimension paper with full descriptions the screeds or lightweight concrete to each of the following flat roof surfaces. Show all sidecasts and references. (20)

Marking criteria:

a) Roof to falls (Refer to Drawing A) (4 marks)
b) Roof to crossfalls (Refer to Drawing B) (5 marks)
c) Roof to falls & crossfalls (Refer to Drawing C) (11 marks)

QUESTION 4 (ALTERATIONS)

Refer to Drawing No: 2011/11-ALTERATIONS – PROPOSED CONVERSION OF OUTBUILDING TO DESPATCH AREA

Measure the Alterations work including new brickwork, foundations and plaster from the drawing. Refer to the notes for all relevant details. The existing floor finishes must be removed. Do not measure the new windows, doors, frames, paintwork and tiling.

Marking criteria:

a. Measuring list (3)
b. Detailed descriptions & sidecasts (31)
c. Detailed dimensions (23)
d. Overall presentation (7) (80)

November 2011

ENPD3DB
QUESTION 5 (PLUMBING & DRAINAGE)

Drawing No: 2010-11-02 refers.

Prepare a pipe & manhole schedule from the information provided and measure the Soil Drainage complete. Work from MH 3 to municipal connection will be done by others.

Marking criteria:

a. Schedule (20)
   b. Taking off of piping, fittings & manholes (55)
   c. Overall presentation (10) (85)
Roof size 36 000 x 18 000 on plan
Screed - 1:4 Cement /sand screed woodfloated on concrete; minimum thickness 20mm
Falls of 1:60
Roof size 33 000 x 18 000 on plan
Screed - 1:4 Cement /sand screed woodfloated on concrete
Falls of 1:50 - minimum 25mm thick
Roof size 30 000 x 16 800 on plan
Lightweight breeze concrete grading to receive waterproofing
Falls of 1:50
70 X 70mm Triangular fillet at junction of floor and inverted beam
NOTES
Wall finishes: plaster & paint externally & internally
Floor finishes: existing: swiss parquet on screed to internal areas
Floor finishes: existing: quarry tiles on cem bedding to entrance areas
Floor finishes: new: take up existing to all areas and prepare & lay new 350 x 350mm ceramic tiles

A remove wooden window & brick up
B form opening for new 2250 wide door
C remove wooden window & brick up
D remove wooden window & replace with new
E form plain opening 2100mm high
F remove 900 x 2100 high steel door & brick up
G new OBW with 700 x 300 mass concrete footing 1m deep
H remove 1200 x 2100mm timber door & sidelight and fit new
Windows north: 1400 x 1200 high
west: 1200 x 1000 high
east: 1500 x 1000 high
PLUMBING & DRAINAGE

SOIL DRAINAGE LAYOUT

NOTES: All main drains to be minimum 2.5m from edge of building to municipal connection by others

27 000
160mm upvc pipe (min 2.5m from edge of building)

TARMAC PARKING AREA (shaded area)

NOTES: All main drains to be minimum 2.5m from edge of building
All manholes are brick type size 600 x 600mm internally x depths as per invert levels
Provide 450 x 600 type 8A double seal cast manhole covers & frames to all manholes
G1 - G5 denotes trapped gulleys
The geotech report confirms that there is no rock on site