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 (6) 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

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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)

Refer to Drawing No: ENPD3DB/2 - PROPOSED CONVERSION OF EXISTING ABLUTION BLOCK INTO NEW STAFF ROOM

Measure on dimension paper with full descriptions the screeds to the flat roof surfaces. Show all sidecasts and references. Screed to fall 1:40. (10)

Marking criteria:

a) Screed calculation (3 marks)
b) Dimensions, descriptions & referencing (7 marks)

QUESTION 4 (WATERPROOFING)

Measure on dimension paper with full descriptions the lightweight concrete to the flat roof to falls and crossfalls on Drawing W. Show all sidecasts and references. (20)

Marking criteria:

a) Breeze concrete calculation (10 marks)
b) Dimensions, descriptions & referencing (10 marks)

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ENPD3DB
QUESTION 5 (DEMOLITIONS AND ALTERATIONS)

Refer to Drawing Nos: ENPD3DB/1 – PLAN OF ABLUTION AREA &
ENPD3DB/2 - PROPOSED CONVERSION OF EXISTING ABLUTION BLOCK INTO
NEW STAFF ROOM

Measure the Demolitions and Alterations work including new blockwork,
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 (5)  
b. Detailed descriptions & sidecasts (31)  
c. Detailed dimensions (23)  
d. Overall presentation (12)  

(71)

QUESTION 6 (PLUMBING & DRAINAGE)

Drawing No: 2012 – SD1 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. Pipe and Manhole Schedule (15)  
b. Measuring List, Taking off of piping, fittings, manholes, etc (54)  
c. Referencing and overall presentation (15)  

(84)

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ENPD3DB
PLUMBING & DRAINAGE

SOIL DRAINAGE LAYOUT

NOTES:
All main drains to be 2,80m from edge of building. Gulleys & vent pipes connected to main drains by 110mm upvc pipes. 27,000. 160mm upvc pipe (2,8m from edge of building)

TARMAC PARKING AREA (shaded area)

NOTES:
All main drains to be 2,80m from edge of building. All manholes are brick type size 680 x 680mm 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. Vp denotes vent pipes. The geotech report confirms that there is no rock on site.
Roof size 30000 x 16800 on plan
Lightweight breeze concrete grading to receive waterproofing
Falls of 1:50
60 x 60mm Triangular fillet at junction of floor and inverted beam