COURSE: DESIGN APPRAISAL AND MEASUREMENT 2B

CODE: ENPD2DB H2

DURATION: 4 Hours

TOTAL MARKS: 100

INTERNAL EXAMINER: MR E Zulu

EXTERNAL EXAMINER: Dr N Harinarain

INSTRUCTIONS AND NOTES

1. A clean copy of the 7th Edition of the Standard System of Measuring Building Work may be brought to the exam room
2. Carefully study all drawings and documents before attempting any question
3. You may make any reasonable assumption regarding any missing details or ambiguous items
4. Answer all questions
ENPD2DB H2: DESIGN APPRAISAL AND MEASUREMENT 2B

QUESTION 1 [40 marks]

Take-off for the substructure starting with site clearance up to and including the ground floor slab. Prepare a bill of quantities for all the items in the take-off. Block work to be reinforced every alternate course in the substructure.

QUESTION 2 [60 marks]

Take-off for windows, glazing, lintels, sills, finishes to head, sills and reveals and all their associated items and make adjustments for the openings to walls, plaster, painting and wall tiles (brick walls and all wall finishes and associated items affected by window openings) only. Prepare a bill of quantities for all items in the take-off with the appropriate adjustments made relative to the quantities given below.

Notes:

- Brick reinforcement is required every 3rd course in the superstructure
- All lintels will be reinforced pre-cast concrete 200mm high with 400mm bearing at each end unless not applicable
- All window sills to be plastered and painted unless the sills are in a region with wall tiles
- All doors are 44mm semi-solid core flush doors finished with a coat of wood primer, undercoat and two coats of gloss paint each with a coat and hat hook, three lever mortice lockset and a 38mm rubber stop
- The entrance porch is finished with 40mm untinted granolithic
- The 1000 x 1000mm foyer leading to the bedrooms is finished the same as the lounge

Make adjustments relative to the relevant items only in respect of quantities given below:

- 150mm concrete block walls in superstructure 434.32 m²
- 150mm wide brick reinforcement built in horizontally 277.12 m
- Cement plaster internally 241.55 m²
- Cement plaster externally 178.64 m²
- Painting in gloss internally 115.54 m²
- Painting in PVA internally 186.30 m²
- Painting in PVA externally 168.21 m²
- ‘Johnson’ glazed wall tiles 87.65 m²
- 375Mu damp proof course on walls 152.64 m²
- 19x69mm wrot meranti skirting 52.58 m
- Varnish to timber skirting’s 52.58 m
- 70mm high untinted granolithic skirting 116.68 m
- 20mm cement screed 131.92 m²
- 27mm cement screed 210.84 m²
- Polypropylene needlepunch carpeting 23.75 m²
- 300x300x10mm ceramic floor tiles 177.60 m²
- 40mm untinted granolithic 81.46 m²
SCHEDULES
- Window
- Finishes

Window Schedule

<table>
<thead>
<tr>
<th>Window</th>
<th>W1 - ND12F – 3No</th>
<th>W2 - NC3 – 1No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>4mm clear float glass</td>
<td>4mm clear float glass</td>
</tr>
<tr>
<td>Burglar bars</td>
<td>NBP18</td>
<td>NBP18</td>
</tr>
</tbody>
</table>

Notes:
- All windows made from standard section galvanised steel
- All windows and doors to be delivered to site factory primed with a metal primer
- All windows to have a metal primer touch up coat before painting with one coat undercoat and two coats high gloss enamel paint
- All doors to have a metal primer touch up coat before painting with one coat undercoat and two finishing coats semi-gloss paint
- All windows to be glazed with linseed oil patty

Schedule of Finishes

<table>
<thead>
<tr>
<th>Floors and skirting</th>
<th>Lounge</th>
<th>Kitchen</th>
<th>Bedroom 1</th>
<th>Bedroom 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type ABC polypropylene needlepunch carpeting on 20mm screed</td>
<td>⬤</td>
<td></td>
<td></td>
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<tr>
<td>300x300mm 'Marleyflex' PVC tiles on 27mm screed, two coats wax polish</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>300x300x10mm ceramic tiles on 20mm screed</td>
<td></td>
<td>⬤</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40mm Untinted granolithic</td>
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</tr>
<tr>
<td>16x69mm Meranti skirting, Sand, seal and two coats, clear polyurethane lacquer varnish</td>
<td>⬤</td>
<td>⬤</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70mm high untinted granolithic skirting</td>
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<td></td>
<td>⬤</td>
<td>⬤</td>
</tr>
</tbody>
</table>

Wall Finishes

| Cement plaster, one coat undercoat and two finishing coats gloss | | |
| Cement plaster, one coat undercoat and two finishing coats PVA | ⬤ | ⬤ | |
| Cement plaster, 150x150 ‘Johnson’ glazed wall tiles up to 1.50m high from FFL | | ⬤ | |
| External wall finish throughout - Cement plaster, one coat undercoat and two finishing coats external quality PVA | | | |

Ceilings and cornices

| 6mm Rhine with 63mm wide scrim over joints finished with skim plaster, on 38x38mm branding at 400mm centre. One coat sealer and two coats interior quality PVA emulsion paint | ⬤ | | |
| Moulded Rhine cornice | | | ⬤ | |