INSTRUCTIONS AND INFORMATION

1. The question paper consists of FOUR questions.
2. Answer ALL the questions.
3. All drawings must be drawn to scale 1:1, unless stated otherwise.
4. The questions must be answered on the answer sheets provided.
5. All the answer sheets must be re-stapled in numerical sequence and handed in irrespective of whether the question was answered or not.
6. Careful time management is essential in order to complete all the questions.
7. Print your name in the block provided on every answer sheet.
8. All answers must be drawn accurately and neatly.
9. Any detail or dimensions not given must be assumed in good proportion.
QUESTION 1: ANALYTICAL (CIVIL)
Given:
Part of the working drawings of a proposed new house with a table of questions which refer to the drawings.

Instructions:
Complete the table below by neatly printing the answers to the questions which all refer to the accompanying drawings and the information block.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>ANSWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What was the reason for the revision on this drawing?</td>
<td>1</td>
</tr>
<tr>
<td>2. What is the project number?</td>
<td>1</td>
</tr>
<tr>
<td>3. What would View A be called?</td>
<td>1</td>
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<tr>
<td>4. What is the abbreviation for the fixture at D?</td>
<td>1</td>
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<tr>
<td>5. What is the minimum width of the foundation indicated at B?</td>
<td>1</td>
</tr>
<tr>
<td>6. What is the floor to ceiling height?</td>
<td>1</td>
</tr>
<tr>
<td>7. What colour must all new masonry be on a presentation drawing?</td>
<td>1</td>
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<tr>
<td>8. In the space provided, draw, in neat freehand, the front view and top view of the SABS graphic symbol for Item C.</td>
<td>4</td>
</tr>
<tr>
<td>9. Show all the calculations for the following three questions</td>
<td></td>
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<tr>
<td>10. Determine the perimeter of the house in meters.</td>
<td>2</td>
</tr>
<tr>
<td>11. Determine the amount of carpet required for the unfurnished bedrooms in square meters.</td>
<td>4</td>
</tr>
<tr>
<td>12. How many tiles are required for the bathrooms if the floor area is 22.5 square meters and the size of each title is 400 x 400 mm?</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL                         31

NAME

NAME
QUESTION 2: SOLID GEOMETRY

Given:
A front view and an auxiliary view of a single solid body consisting of a pyramid and prism.

Instructions:
2.1 Draw a sectional top view on cutting plane AA.
2.2 Draw a left view.

Note:
Do not show any hidden detail

[30]
QUESTION 3: PERSPECTIVE

Given:
A plan and two elevations of a kiosk, as well as the Picture Plane (PP), Horton Line (HL), Ground Line (GL) and Station Point (SP).

Instructions:
- Determine the vanishing points and label them.
- Draw the two point perspective view of the kiosk.

Notes:
No hidden detail must be shown.
Show all the construction lines.
QUESTION 4: CIVIL DRAWING

Given:
- The incomplete south elevation of a students’ residence showing the walls, the position of the front door, sliding door, window, roof and notes
- The incomplete floor plan showing the walls, position of the doors, windows, fixtures and electrical symbols
- Roof notes and a schematic diagram of one roof truss
- A diagram showing the room designation and floor finishes
- The incomplete foundation and wall detail
- A table of electrical symbols
- A door and window schedule
- The incomplete floor plan of the students’ residence, drawn to a scale of 1:50 on page 6

Instructions:
Use answer sheet 4 and the information given on page 5 to draw, according to the given specifications, the following views to a scale of 1:50:
- The complete floor plan
- The complete south elevation
- The complete sectional elevation on cutting plane A-A

SPECIFICATIONS:

THE FLOOR PLAN
Add the following features to the floor plan:
- All the doors and windows
- All the fixtures as indicated by the abbreviations
- All the electrical symbols as indicated by the numbers
- All the hatching detail

THE SOUTH ELEVATION
Show the following features on the south elevation:
- The outer walls
- The roof detail including the gutter, fascia board and the rainwater downpipes
- The doors and window detail

THE SECTIONAL ELEVATION
Show the following detail on the sectional elevation:
- The complete foundation, wall, slab, screed, roof and ceiling detail
- The door and window detail
- All hatching detail

Label the following:
- The south elevation and sectional elevation
- The room designations with floor finishes
- Using the correct abbreviations label the following features in the correct view: finished floor level and damp proof course.

NOTE:
All substructure hatching may be done in freehand. All drawings must comply with the guidelines contained in the SABS 0143.

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INSTRUKSIES EN INLIGTING

1. Die vraestel bestaan uit VIER vrae.
2. Beantwoord ALLE vrae.
3. Alle tekene moet volgens skaal 1:1 gemaak word, tensy anders vermeld.
4. Alle vrae moet op die gegewe antwoordvelle beantwoord word.
5. Alle antwoordvelle moet weer in nommervolgorde vasgekram en ingelewer word, ongeag of die vraag beantwoord is of nie.
6. Sorgvuldige tydsbeplanning is nodig om alle vrae te beantwoord.
7. Drukskryf jou naam in die blokkie op elke antwoordvel voor.
8. Alle antwoorde moet akkuraat en netjies gedoen word.
9. Besonderhede of afmetings wat uitgelaat is moet in goeie verhouding bereken word.

SLEGS VIR AMPTELIKE GEBRUIK

<table>
<thead>
<tr>
<th>omskere</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
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<td>PUNT VERWERKTE</td>
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<td>FINALE VERWERKTE</td>
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VOORBEREIDINGSEKSMEN

SEPTEMBER 2014

INGENIEURSGRAFIKA EN -ONTWERP V1

GRAD 12

Nasionale

SENIOR SERTIFIKAT

OS-KAAR ONDERWYSDEPARTEMENT

EASTERN CAPE EDUCATION DEPARTMENT

ISEE LEMFUNDO LEMPUMA KOLONI

INSUKUESIS EN INLIGTING