

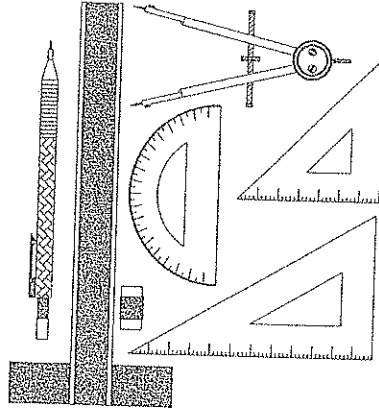
# HILLCREST HIGH SCHOOL NOVEMBER EXAMINATION ENGINEERING, GRAPHICS & DESIGN

GRADE 11  
2013  
PAPER 1

**MARKS: 200 TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 5 pages including the cover page and 3 questions.
2. All questions must be answered.
3. Unless specified otherwise, all questions are in First Angle Orthographic Projection.
4. Unless specified otherwise, all questions are to be completed to a scale of 1:1.
5. All answer sheets must be re-stapled in numerical order, even questions that are not attempted/blank.
6. All construction work must be shown, even if a stencil was used.
7. Print your NAME neatly on each page.
8. Use only the drawing sheets provided.
9. Your drawings should reflect neatness and accuracy.
10. All dimensions or detail not given may be assumed in good proportion.



QUESTION	SECTION	MARK	MAXIMUM
1	TRANSITION PIECE DEVELOP		35
2	TWO POINT PERSPECTIVE		40
3	CIVIL ASSEMBLY		100
TOTAL			175
SYMBOL			100

NAME

NOVEMBER 2013  
 GRADE 11 P1  
 QUESTION 1  
 35 MARKS

DEVELOPMENT

The figure below shows the front view and top view of a Funnel.

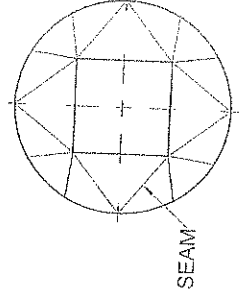
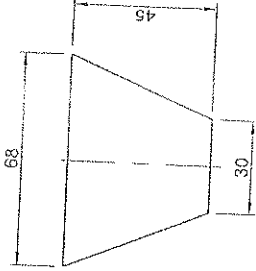
Draw the following:

- 1.1 The front view.
- 1.2 The top view.
- 1.3 Develop the surface of the Funnel.
- 1.4 Show all necessary construction and fold lines.
- 1.5 Start with the Seam for the development.

**ASSESSMENT CRITERIA**

You will be assessed on your ability to do the following:

- draw the given views 4
- draw the true lengths 6
- develop the transition piece 18
- start with the seam for the development 2
- show all constructions 2
- show all centre lines 3



FV	4
TV	4
RV	18
Dev	27
SEA	4
CL	6
CON	7
TOT	70

NAME

ANSWER SHEET 1

NOVEMBER 2013  
GRADE 11

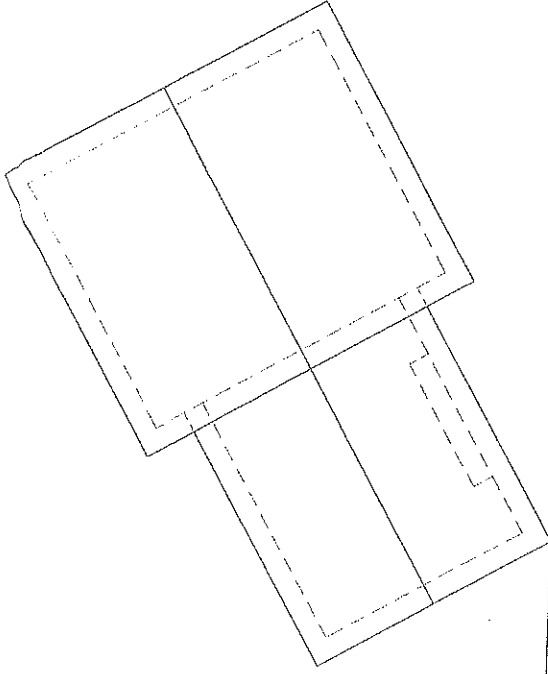
QUESTIONS  
MARKS

2PT  
PERSPECTIVE

The figure shows the views of a simple dwelling.  
Draw a neat TWO POINT PERSPECTIVE drawing  
of the given dwelling.  
Show all construction  
Label the vanishing points LVP and RVP.  
Do not show any hidden detail!

**ASSESSMENT CRITERIA**  
You will be assessed on your ability to do  
the following:

- find the vanishing points 4
- draw the 2pt perspective 32
- show all constructions 4

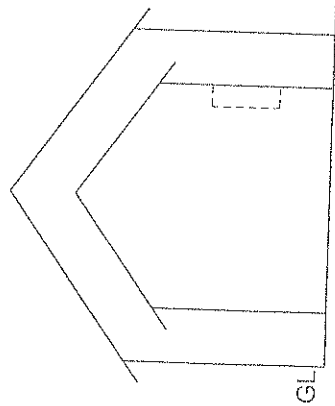


PP

PP

HL

HL



GL

GL

SP

ANSWER SHEET 2

NAME

# GRADE 11 CIVIL ASSEMBLY

100 MARKS

Details for a tiled new GAMES ROOM is as follows:

The following is given :

- A schematic floor plan
  - ▶ window position & door position
  - ▶ perimeter dimensions & cutting plane A-A
- A schematic elevation
  - ▶ window position and door position
  - ▶ ceiling height, ground level & floor level
- Door and Window detail
- Incomplete foundation detail

Draw the following:

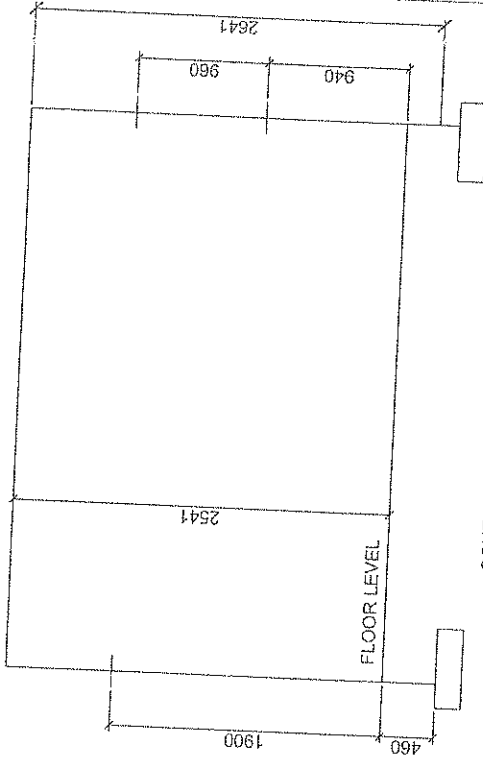
- 1) The complete floor plan
  - 2) The complete sectional elevation
- Answer this question on the prepared answer sheet.
  - Use a scale of 1:40.
  - All drawings must comply with SABS 0143

### FLOOR PLAN INSTRUCTIONS

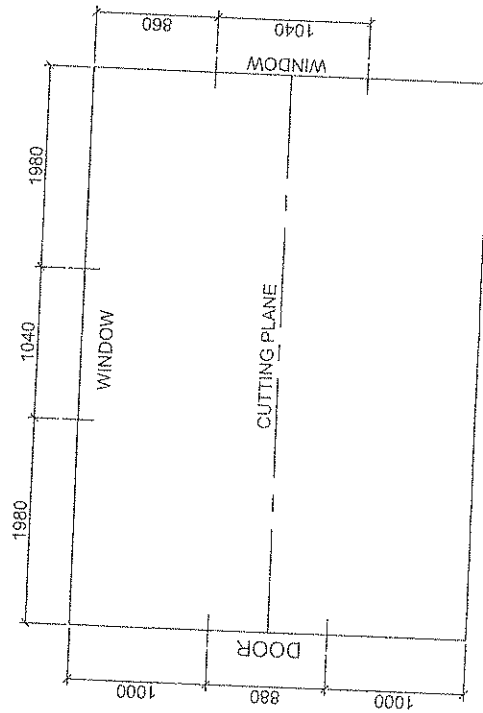
- Hatch all the walls
- Insert all window and door details
- Insert and label the cutting plane
- Label the floor plan, Print the scale, indicate the floor finish

### SECTIONAL ELEVATION INSTRUCTIONS

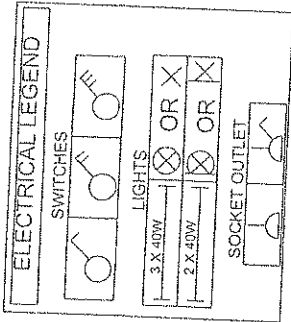
- Complete the foundation details
- Insert all floor slab details
  - ▶ use 20mm screed
  - ▶ use 90mm compacted hardcore filling
- label ground level and damp proof course
- draw in sectional window with brick window sill
  - ▶ use TWO 110 X 80 concrete lintels above window
  - ▶ use 200 X 121 brick window sill
  - ▶ label the damp proof course
- draw the second window
- draw the door
  - ▶ use TWO 110 X 80 concrete lintels above door
  - ▶ label the damp proof course
- complete all hatch detail
- label the sectional elevation
- insert electrical detail according to the legend given:
  - ▶ A single TWC, 40 watt fluorescent tube light fitting in the centre of the ceiling.
  - ▶ A single wall mounted light outside the door
  - ▶ ONE switched socket outlet on the wall with no window.
- ▶ ONE switch for BOTH lights.



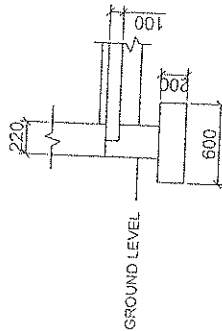
SCHEMATIC SECTIONAL ELEVATION



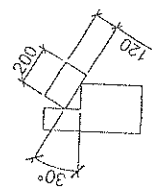
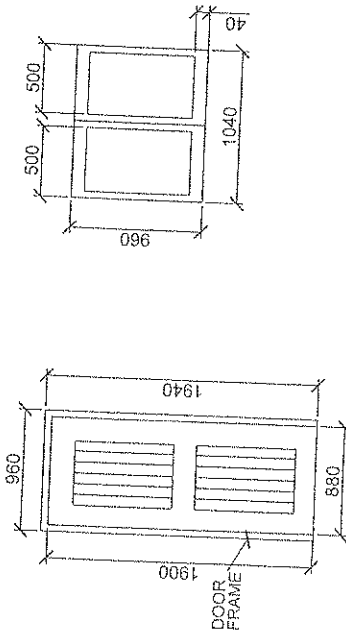
SCHEMATIC FLOOR PLAN



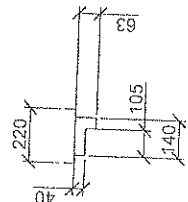
### INCOMPLETE FOUNDATION DETAIL



### WINDOW & DOOR DETAIL



WINDOW SILL DETAIL



DOOR FRAME DETAIL

ASSESSMENT CRITERIA

SECTIONAL ELEVATION		
1	WALLS	9
2	WINDOW 1	7
3	WINDOW 2	5
4	DOOR	5
5	FOUNDATION SLAB	10
6	DPC	3
7	LABELS	2
8	HATCHING	19

FLOORPLAN

9	WINDOWS	8
10	DOOR	5
11	WALLS	6
12	CUTTING PLANE	4
13	LABELS	4
14	ELECTRICAL	6
15	HATCHING	7

TOTAL	100
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NAME \_\_\_\_\_