

NAMIBIA SENIOR SECONDARY CERTIFICATE

DESIGN AND TECHNOLOGY ORDINARY LEVEL

4129/2

PAPER 2

1 hour 45 minutes

Marks 60

2018

Additional Materials: A3 drawing paper
 Non-programmable calculator
 Standard drawing equipment

INSTRUCTIONS AND INFORMATION TO CANDIDATES

- Answer on the separate A3 drawing paper provided.
- Write your Centre Number, Candidate Number and Name on all the work you hand in.
- Do not use correction fluid.

- There are **three** questions in this Question Paper.
- Answer **one** question only.

- At the end of the examination, fasten all your work securely together.
- The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **4** printed pages.



Republic of Namibia
MINISTRY OF EDUCATION, ARTS AND CULTURE

There are **three** questions in this question paper.

Answer **one** on the A3 drawing paper provided.

1 Design Communication

With careful planning, a big room can be transformed into a flat.



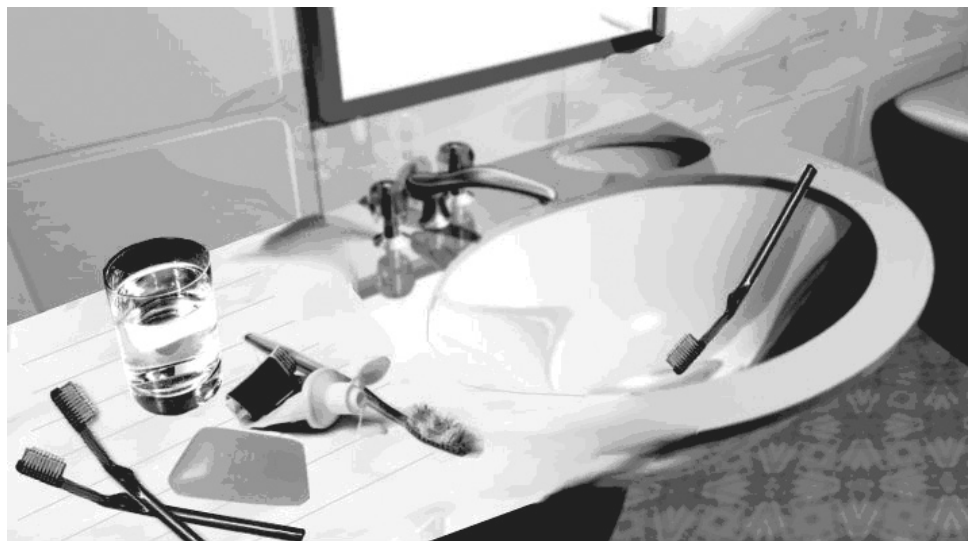
A floor plan to convert a big room into a flat, approximately 4 m x 5 m, is required. The floor plan should make provision for a bathroom (with toilet, shower and basin), bedroom and kitchenette.

- (a) List **four** additional specification points for the floor plan. [4]
- (b) Use graphics to show **two** possible symbols that could be used to indicate the bathroom. [4]
- (c) Explore and sketch **three** ideas for a floor plan for the flat. [15]
- (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
- (e) Draw, using any suitable method, your final design solution. Include all major detail, graphics and keys. [18]
- (f) Suggest suitable materials to make architectural models of buildings. [4]
- (g) Use sketches and notes to describe how a scale model of your solution could be made in a school workshop. [7]

[60]

2 Resistant Materials

A bathroom could become very untidy if toiletries and other utensils are not properly stored.



You are required to design a suitable unit to store toiletries and other relevant utensils in a bathroom.

Your design should make provision for six tooth brushes, a tube of toothpaste and a glass.

It should be fitted with a means so that it could be fixed to the wall near the basin.

- (a) List **four** additional specification points for such a unit. [4]
- (b) Describe **two** methods of fixing such a unit to a wall. [4]
- (c) Explore and sketch **three** ideas for such a unit. [15]
- (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
- (e) Draw, using any suitable method, your final design solution. Include dimensions and construction details of the unit. [18]
- (f) Suggest suitable materials for your solution and give reasons for your choice. [4]
- (g) Use sketches and notes to describe how your solution could be made in a school workshop. [7]

[60]

3 Technology

In winter, some people find it difficult to wake up even if their alarm clocks ring.



A system to squirt a tiny water stream at the wake-up time, is required.

- (a) List **four** additional specification points for the system. [4]
- (b) Describe **two** mechanisms that could be used to squirt the water. [4]
- (c) Explore and sketch **three** ideas for a such a system. [15]
- (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
- (e) Draw, using any suitable method, your final design solution. Include dimensions and construction details of the system. [18]
- (f) Suggest suitable materials for your solution and give reasons for your choice. [4]
- (g) Use sketches and notes to describe how your solution could be made in a school workshop. [7]

[60]