

NAMIBIA SENIOR SECONDARY CERTIFICATE

DESIGN AND TECHNOLOGY ORDINARY LEVEL

4129/2

PAPER 2

1 hour 45 minutes

Marks 60

2019

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, staple 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 paper.

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

1 Design Communication

People are now being encouraged to buy local food produce so that local farmers can be kept in business and transport costs kept to a minimum.



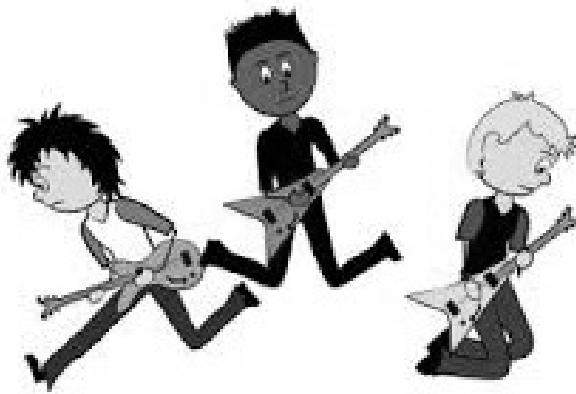
You have been asked to design a lightweight cardboard shop display, that includes movement, to advertise local produce.

- (a) List **four** points about the function of such a display that you consider to be important. [4]
- (b) Use graphics to show **two** possible letter styles that could be used on the display. [4]
- (c) Develop and sketch **three** ideas for the display. [15]
- (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
- (e) Draw, using a method of your own choice, your final design solution. Include all major details and graphics. [18]
- (f) Describe how the use of computers could assist in the design of such a display. [4]
- (g) Use sketches and notes to describe a small item that could be made to sensitise the community to support local farmers. [7]

[60]

2 Resistant Materials

Musicians sometimes play from their music books and need to use music stands.



Many folding music stands are very difficult to erect and not very stable in use.

The stand must be able to fold and be carried in a school bag from place to place.

- (a) List **four** points about the function of such a music stand that you consider to be important. [4]
- (b) Use sketches and notes to show **two** types of flexible joints that could be used to join materials together. [4]
- (c) Develop and sketch **three** ideas for the music stand. [15]
- (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
- (e) Draw, using a method of your own choice, your final design solution. Include dimensions and construction details. [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

Due to increasing fuel prices, people are being encouraged to cycle to work or school. However, cyclists can be at particular risk whilst giving hand signals as they approach busy road junctions, perhaps causing them to wobble into the path of vehicles.



Some form of indicating device would be a good idea.

Your device must not interfere with riding, and be mechanically or electronically operated.

- (a) List **four** points about the function of such a device that you consider to be important. [4]
 - (b) Use sketches and notes to show **two** places on a bicycle where it could be mounted. [4]
 - (c) Develop and sketch **three** ideas for the device. [15]
 - (d) Evaluate your ideas in (c) and justify the selection of the idea you have chosen to develop. [8]
 - (e) Draw, using a method of your own choice, your final design solution. Include dimensions and construction details. [18]
 - (f) Suggest suitable materials for your solution and give reasons for your choice. [4]
 - (g) Use sketches and notes to describe how your device could be made in a school workshop [7]
- [60]**