

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Advanced Level

WOOD TECHNOLOGY AND DESIGN

6027/4

Paper 4 Design Project

SPECIMEN PAPER

No additional materials are required.

INSTRUCTIONS TO CANDIDATES

Attempt **one** option only.

This specimen paper consists of 3 printed pages and 1 blank page.

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General Notes

Teachers should refer to the syllabus items 8.2.1, 8.3.1, 8.3.2, 8.4.1, 8.5.1, 8.7.1 and 9.0 'a' and 'b' for guidance.

Candidates should choose **one** project from the options below and produce a:

- detailed A3 Design Folio showing the development of the Design Process from situation through to plans for solutions. Costing and Final Evaluation of the project should appear in the folio,
- well constructed scaled mock-up/model of the developed solution,
- well constructed artefact of the solution.

NB: Candidates are advised to combine different materials preferably wood, metal and (nylon) plastics with wood predominant over other materials.

Computer applications like CAD or CAM may be used.

Production of the artefacts should be preceded by the following (where possible):

- Testing for moisture content before use,
- Testing for strength of the timber before use,
- Jigs and templates should be incorporated,
- Consider patenting process and quality control measures in the evaluation.

OPTION 1

SITUATION

A family keeps a number of paperback books which are used frequently and are difficult to keep tidy as they have no set place where they can be stored.

BRIEF

Design and make a free-standing unit to store paperback books neatly.

The unit should:

- accommodate at least three different sizes of the books,
- made from solid wood,
- incorporate angle joints,
- be machined.

OPTION 2

SITUATION

An old man suffered a mild stroke. He finds it difficult to feed whilst seated on the bed.

BRIEF

Design and make a unit suitable for serving meals to a sick person in bed.

The unit should:

- be mobile,
- be adjustable to any desired height,
- have a braking mechanism,
- be machined.

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