EXAMINATIONS COUNCIL OF ZAMBIA

JUNIOR SECONDARY SCHOOL LEAVING EXAMINATION (GRADE 9) – 2014

DESIGN AND TECHNOLOGY 608/3

PAPER 3

(SPECIMEN)

(INTERNAL AND EXTERNAL CANDIDATES)

MAJOR PROJECT

PROJECT THEME

INSTRUCTIONS TO CANDIDATES

1. This project theme should be notified to candidates at the end of the third term of Grade 8.

2. The project should start at the beginning of the first term of Grade 9 and should be completed by the end of September.

3. All materials are to be provided by the school.

4. Candidates must write the following on the cover page of the Portfolio.
   a  Candidates Name
   b  Candidate Examination Number
   c  Centre Name
   d  Centre Number
   e  Project title
The theme for the 2015 Major project is storage.

You are required to design and make a product which will solve a real life problem within your home.

The following situation is obtaining at your home.

Every morning your mother reports late for work because she spends a lot of time looking for Ear Rings and necklaces in her bedroom.

Identify a problem from the given situation and come up with a design solution.

Here are two parts to the project:

(i) Part A – Portfolio Design
(ii) Part B – Product Realisation

PART A – PORTFOLIO DESIGN

The portfolio is to be A4 size format and should consist mainly of illustrations and drawings, supplemented where necessary with written notes. Paste-ups/pictures may be included where necessary. Pages should be numbered and a list of contents, referenced with page numbers, included. The portfolio should include the following sections in the given order:

1 List of contents
   This must include titles and page numbers of the whole portfolio.

2 Situation
   Statement of the given situation derived and linked to the theme.

3 Problem
   A clear statement of the problem to be solved without including possible solution. It must be derived from the solution.

4 Brief
   An intended design task described in general but accurate terms of what is intended to be made. Candidates must not state the name of the product to be made.

5 Specification
   A design specification that will set the parameters and limitations. These must be itemised requirements to be met by the solution.
6 Research
Candidates are required to make a research on relevant existing ideas, collection of data (e.g. sizes, space, material, joints etc.) This can be in form of paste ups or free hand sketches. They must also show the use of correct information throughout the portfolio.

7 Possible Solutions
Exploration of a range of ideas/solutions to meeting the design brief and specification.

8 Development of a chosen Solution
Detailed development of the selected idea, including shape and form, materials and constructions to be used. This should also include a presentation drawing of the final design in any pictorial form.

9 Working Drawing(s)
Orthographic drawings of the intended solutions must conform to International Standard Organisation (ISO). Part drawings and developments can be used for more complicated solutions.

10 Production Plan
Identify sequential stages and processes with consideration of some of the more complex tasks to be used in the construction of the solution. Candidates are also expected to show material list and time chart.

11 Presentation
Candidates must show clearly a range of graphic communication skills including the use of colour as well as good written communication skills throughout the portfolio.

12 Evaluation
This will be a report based mainly on how the product matches the design requirements as identified in the specifications. There will be evidence of testing to check if the project solves the problem. Other sections of the portfolio should reveal the on-going evaluation by the candidate as the design was developed by showing the basis of decisions made. Candidates are also expected to show the good and bad points of their design. They should indicate any possible modifications to be done in improving their product.

PORTFOLIO PRESENTATION
The complete portfolio must be bound using one of the following methods:
- Spiral binding
- Tape and staple binding
- Thermal binding
- Slide binders

Candidates are advised to rely more on graphics than text.
PART B – PRODUCT REALISATION

Production of the product should involve and display a range of skills learnt. It can be made from a single material or a range of appropriate materials.

Candidates are advised to avoid making large projects as they may affect the quality and/or cost of the product.

(i) **Suitability of purpose**
    Candidates must make a product which satisfies the brief and specification.

(ii) **Workmanship**
    Candidates must display mastery of a range of making skills.

(iii) **Use of Material**
    Candidates must have sound judgement in choosing materials regarding properties and economy.

**TEACHER’S NOTES:**

This is a continuous assessment project and teachers are expected to continue teaching and support the candidates through advice and guidance throughout the project.

Main decisions and judgements are to be made by candidates.

Practical work should be done by candidates with guidance from the teacher where necessary.

Complicated processes can disadvantage candidates if they are not well executed.

**NB:** **MARKING OF THE PORTFOLIO SHOULD BE DONE CONTINUOUSLY AND NOT AT THE END OF THE PROJECT.**