

PRINCIPAL EXAMINER'S REPORT



BOTSWANA
EXAMINATIONS
COUNCIL

JCE DESIGN & TECHNOLOGY 2023

Introduction

Generally, the performance of the candidates was low compared to that of the previous year's candidates. Despite the low performance noticed this year's the cohort was able to access section A which comprises mostly of recall questions compared to their counterparts of the previous year. Poor sketching which resulted in loss of marks and candidates were not able to articulate themselves in the processes demanded by the questions. They failed to show logical progression of all processes and tools required.

Section A

Question 1

Most candidates were able to give the correct name of the fitting.

Question 2

Most candidates were able to define the term energy.

Question 3

Poorly attempted by most candidates especially part (ii) of the question.

Question 4

- a) Some candidates confused it with hot air gun instead of hot glue gun.
- b) Poorly attempted by most candidates as they stated the use as being to apply glue instead of melting the glue stick.

Question 5

It was evident that some candidates were not provided with drawing instruments as they did the bisecting free hand which resulted in loss of marks.

Question 6

Most candidates were able to respond positively to the demand of the question by stating the difference, though they gave different synonyms to describe the concepts.

Question 7

The question was fairly attempted as most candidates were able to state that the saw cuts when pulled or on a backward stroke.

Question 8

- a) it was well attempted as candidates correctly defined structures.
- b) Well attempted as well by correctly defining mechanisms.

Question 9

Candidates were not able to state the correct use of a corner-halving joint.

Question 10

Candidates stated the general name of filing instead of stating the specific method of filing, and most candidates were able to give the correct process of abrading and abrasive paper.

Section B

Question 11

(a) Most candidates responded well by stating the correct specific materials and (b) reason for the choice of material.

(c) Candidates gave the correct mechanism required for the production of amusement.

(d) Most candidates failed to sketch the stated mechanism. Some sketches lacked details to show the mechanism.

Question 12

(a) Candidates were able to come up or identify problems associated with the illustration/toolbox given.

(b) Although candidates were able to come up with the correct design to solve the problem, they missed the part of mounting. Most sketches were not in 3D but were 2D or a combination of the two and therefore lacked details.

(c) Most candidates did well on the process of measuring and marking out but failed to state the correct tools for drilling and fixing on the wall.

Question 13

(a) Candidates did well on stating the specific wood that can be used for the stand.

(b) Candidates gave the correct choice of wood for (a).

(c) Correct sketch of measuring and correct tools stated, but sketches for marking out were not forthcoming.

(d) Candidates dismally failed the part of the question as most gave new ideas instead of modifying the given stand.

Question 14

Most candidates failed to sketch the idea as the sketches did not give details. They, however, did well in showing compartments for the bottles. Most candidates lost marks as their ideas did not show easy carrying of their artefacts. Even though the materials were correctly stated, the construction was poorly shown. The finish was correctly stated by most candidates.