Name. $\qquad$
Class Candidate's Signature. Date $\qquad$

## 444/1

WOOD WORK
TIME: $2 ½$ HOURS

## KAMDARA JET - 2016

## Instructions to candidates

(a)This paper has two sections : A and B
(b) Answer all questions in section $\mathbf{A}$. From section B, answer quęstion 8 and any other three questions.
(c)All dimensions are in millimetres unless otherwise stated.

For Examiner's Use Only

| Section | Question | Maximum Score | Candidate's Score |
| :--- | :--- | :--- | :--- |
| A | $1-7$ | 240 |  |
| B | 8 | 15 |  |
|  | 9 | 15 |  |
|  | 10 | 15 |  |
|  | 11 |  |  |

## SECTION A : (40 MARKS)

1(a) List four tools used for wood carving.
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$\qquad$
$\qquad$
(b) Using a labeled sketch give the meaning of the term "saw kerf." (3 marks)
(c) With the aid of sketches differentiate between a firmer chisel and bevel - edged chisel.

2(a) With the aid of sketches, show the difference between a wire nail and panel pin nail.
(3 marks)
(b) Sketch each of the following joints and state the classification under which each joint falls.
(i) wedged scarf joint (2 marks)
(ii) tongue and groove
3. With the aid of sketches, describe two methods of planing end grain of a given work piece.
(4 marks)

4 State five factors to consider for good housekeeping in the workshop.
(5 marks)
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$\qquad$
$\qquad$

5 Describe the procedure of planing the face edge of a piece of timber measuring $1000 \mathrm{~mm} \times 100 \mathrm{~mm} \times 50 \mathrm{~mm}$ to be flat and straight.
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$\qquad$
$\qquad$
$\qquad$
6. Describe each of the following defects in timber.
(5 marks)
(a) Knots
(b) Checks

(c) Shakes $\qquad$
(d) waney edges

(e) Upsets

7(a) Explain why dull tools are more likely to cause accidents than sharp tools.
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$\qquad$
(b) Describe how a marking knife is used to square a line across wood and state two reasons why it is preferred to a pencil.
(3 marks)
$\qquad$
$\qquad$
$\qquad$


## SECTION B: (60 marks)

Answer question 8 and any three questions from this section.
Candidates are advised to spend not more than 25 minutes on question
8.
8. Fig. 1 shows a machined block. Draw FULL SIZE, the three orthographic views in first angle projection.


6

9(a) Outline the procedure of fitting a bit to a hand drill and using it to drill a through hole.
(b) A timber specimen of dimensions $300 \times 100 \times 50 \mathrm{~mm}$ was found to have a density of $2.8 \times 10^{5} \mathrm{~kg} / \mathrm{m}^{3}$. After oven drying it weighed 3.0 kg . Calculate the moisture content.
(c) State four advantages of plywood over solid timber.

10(a) With the aid of suitable sketch, outline the steps followed when reconditioning a cross - cut saw.
(b) Sketch the following tools and state where each is used. (5 marks)
(i) outside calipers
(ii) inside calipers

11(a) Outline the procedure of preparing a water stain.
(b) List five safety precautions to be observed when bleaching a piece of timber.
(c) List five procedures followed when preparing a surface before application of a surface coat.
(d) Describe three reasons why surface coating is done. (3 marks)
12. With the aid of labeled sketches, outline the procedure of cutting and fixing laminated plastic (formica) onto a table top.
(15 marks)


